CURRICULUM VITAE

University of Idaho

NAME: Matthew E. Doumit RANK: Professor DEPARTMENT: Animal and Veterinary Science DATE: January, 2014

OFFICE LOCATION AND CAMPUS ZIP:

Agricultural Science 209 P.O. Box 442330 Moscow, ID 83844-2330 **OFFICE PHONE:** 208-885-6007 **FAX**: 208-885-6420 **EMAIL:** mdoumit@uidaho.edu

EDUCATION:

Ph.D., Michigan State University, East Lansing, MI, 1994, Animal Science/Muscle Biology M.S., South Dakota State University, Brookings, SD, 1989, Animal Science/Muscle Biology B.S., Washington State University, Pullman, WA, 1987, Animal Science

Certificates and Licenses:

Beef Quality Assurance Certified, 9-2010, recertified 9-2012 Hazard Analysis Critical Control Points Certified, International HACCP Alliance, 2007

EXPERIENCE:

Teaching, Extension, Research, and Administrative Appointments:

- **Professor,** ~60 Teaching/~40% Research, Department of Animal and Veterinary Science, University of Idaho, 7/11 to present.
- Acting Department Head, Department of Animal and Veterinary Science, University of Idaho, 8/13 to 1-14.
- Associate Professor, 50% Teaching/50% Research, Department of Animal and Veterinary Science, University of Idaho, 8/08 to 6/11.
- Associate Professor, 50% Teaching/50% Research, Departments of Animal Science and Food Science & Human Nutrition, Michigan State University, 7/02 to 7/08.
- Assistant Professor, 50% Teaching/50% Research, Departments of Animal Science and Food Science & Human Nutrition, Michigan State University, 8/96 to 6/02.
- **Post-Doctoral Research Associate,** Meats Research Unit, USDA-ARS, 5/94 to 6/96. Roman L. Hruska U.S. Meat Animal Research Center, Clay Center, NE. Investigated role of calpain proteases on meat tenderness and muscle growth. Developed rapid detection method (ELISA) for calpastatin.
- **Instructor,** Department of Animal Science, Michigan State University, 8/93 to 12/93. Served as instructor for Animal Products (ANS 210) and Meat Science & Muscle Biol. (ANS 416).
- **Graduate Research Assistant,** Department of Animal Science, Michigan State University, 1/90 to 8/93 and 1/94 to 5/94. Conducted the first studies on porcine muscle satellite cell isolation and characterization and identified androgen receptors on satellite cells.
- **Graduate Research Assistant,** Department of Animal and Range Sciences, South Dakota State University, 8/87 to 8/89. Participated in optimization of turkey muscle satellite cell isolation and culture conditions, and characterization of IGF receptors. Examined satellite cell and serum mitogenic activities from turkeys differing in age and gender.

TEACHING ACCOMPLISHMENTS: Courses Taught at University of Idaho:

- AVS 109, Science of Animals that Serve Humanity, 3 credits, Fall, 2008, 2009,
- AVS 109, Science of Animals that Serve Humanity, 4 credits, Fall, 2010-present.
- AVS 204, Special Topics/Livestock and Carcass Evaluation, 2 credits, Fall, 2008.
- AVS 263, Live Animal and Carcass Evaluation, 3 credits, Fall, 2009 to present. Co-teach.
- AVS 209, Science of Animal Husbandry, 3 credits, Spring, 2009, 2010.
- AVS 209, Science of Animal Husbandry, 4 credits w/lab, 2011-present.
- AVS 210, Animal Husbandry Laboratory, 1 credit, Spring, 2009, 2010.
- AVS 363, Animal Products for Human Consumption, 3 credits, Spring, 2009 to 2011.
- AVS 363, Animal Products for Human Consumption, 4 credits, Spring, 2012 to present
- AVS 463, Growth and Lactation, nine 75 min lectures, Fall, 2013
- AVS 474, Beef Cattle Science, Coordinator of team taught course, 3 credits, Spring, 2009.
- AVS 504/567, Advanced Physiology, five 75 min lectures, Spring, 2011, 2013

Courses Taught at Michigan State University:

- ANS 210, Animal Products, 4 credits, Fall, 1996 to 2007.
- ANS 415, Growth Biology, Spring, 1997 to 2008 Co-taught.
- ANS 416, Meat Science and Muscle Biology, Spring, 1997, Fall, 1997 to 2007.

Courses Developed at University of Idaho:

- Science of Animals that Serve Humanity (AVS 109, 3 Cr., 4 Cr. beginning in 2010). Developed new lecture materials, PowerPoint presentations, homework assignments, and evaluation methods in 2008. Adopted new textbook for both AVS 109 and 209 in 2009 and substantially modified lecture content and sequence. Course provides a foundation of knowledge in disciplines essential for improving animal production: genetics, anatomy, physiology, endocrinology, reproduction, nutrition, behavior, and animal products.
- Science of Animal Husbandry (AVS 209, 3 Cr., AVS 210 Laboratory, 1 Cr. Lecture and lab was combined as one 4 credit course (AVS 209) in 2011). Developed new lecture materials and presentations, homework assignments, and evaluation methods in 2009. Course describes the uses of animals in society and characteristics of domestic livestock species, and explains animal husbandry practices used in the safe and effective management of livestock.
- Live Animal and Carcass Evaluation (AVS 263, 3 Cr). One lecture, ~6 hours of lab per week. Developed lecture material and co-teach lecture and laboratories on evaluation and selection of replacement breeding cattle, swine, and sheep, as well as market animal and carcass evaluation and pricing.
- Animal Products for Human Consumption (AVS 363, 3 Cr. increased to 4 Cr. in 2012). Developed lecture and laboratory materials on animal products, which include meat science and muscle biology, as well as dairy products.
- Growth and Lactation (AVS 463, 3 Cr). Developed nine 75 minute lectures on development and growth of skeletal muscle, adipose tissue, and bone.
- Beef Science (AVS 474, 3 Cr). Coordinated course in 2009 and developed seven lectures on worldwide and U.S. beef industries, cattle growth, management for beef quality, and beef carcass grading.
- Advanced Physiology (AVS 567, 4 Cr.) Developed five 75 min lectures on muscle physiology.

Courses Developed at Michigan State University:

During my 12 years on the faculty at Michigan State University, I developed course information and provided instruction for students in Animal Products (ANS 210; 4 credits) in fall, 1996 to 2007 (1202 students total). My responsibilities included lecture and laboratory instruction (4 sections) in the identification, fabrication, processing, merchandizing and proper handling procedures of meat animal products. Animal Products instruction involved approximately 15 student-contact hours per week. I developed course information and taught Meat Science and Muscle Biology (ANS 416; 2 credits) in spring, 1997 and fall, 1997 to 2007 (162 students total). This course covered topics in muscle biology, growth, conversion of muscle to meat, qualitative and quantitative properties of meat, and food safety. Developed and contributed 9 lectures in Biology of Growth and Lactation (ANS 415; 3 credits) in the spring of 1997 and 1998 (45 students), and team taught (~ first half) Growth and Musculoskeletal Biology Course in spring, 1999 to 2008 (208 students total; ANS 415/890). In the spring of 2000 and 2002, I served as MSU facilitator for a graduate course on Animal Growth taught via videoconference from Purdue University. I mentored 26 independent study students in teaching and research activities.

Semester	Course	Actual	Course		
		Enrollment	Responses	Performance	Quality
Fall 2008	AVS 109	95	60	3.7	3.6
Spring 2009	AVS 209	81	51	3.8	3.5
	AVS 210	77	46	3.8	3.7
	AVS 363	18 + 3 WSU	15	3.8	3.4
	AVS 474	28	14	3.5	3.6
Fall 2009	AVS 109	81	57	3.6	3.5
	AVS 263	8 + 6 WSU	4	4.0	4.0
Spring 2010	AVS 209	51	34	3.8	3.7
	AVS 210	51	34	3.8	3.6
	AVS 363	24 + 11 WSU	15	3.8	3.7
Fall 2010	AVS 109	106	77	3.6	3.6
	AVS 263	11 + 6 WSU	5	4.0	4.0
Spring 2011	AVS 209	78	45	3.9	3.6
	AVS 363	35 + 14 WSU	20	4.0	3.9
Fall 2011	AVS 109	108	68	3.6	3.6
	AVS 263	12 + 1 WSU	8	4.0	3.9
Spring 2012	AVS 209	87	56	3.9	3.7
	AVS 363	26 + 8 WSU	15	3.7	3.5
Fall 2012	AVS 109	101	60	3.5	3.4
	AVS 263	13	11	4.0	4.0
Spring 2013	AVS 209	75	39	4.0	3.8
	AVS 363	30	11	4.0	3.8
Fall 2013	AVS 109	116	83	3.8	3.7
	AVS 263	15	14	3.9	3.9

Summary scores and selected narrative comments from UI student evaluations. Rating scale is 1 to 4, with 4 being superior.

Selected narrative comments:

AVS 109

Dr. Doumit is a great professor! Given the class size, he actually takes the time to try to learn people's names and backgrounds. As a first year student, this was the kind of class I was looking forward to at the University of Idaho. A professor that takes the time to relate to the students and gives easy to understand lectures is great! Not many universities give students that opportunity. I'm looking forward to taking more of Dr. Doumit's classes in the future!

Great instructor, very helpful, spent extra time out of class to help and better understand.

He was the most prepared, helpful college professor that I have ever had. He went out of his way to be available to all of his students. Dr. Doumit made class fun and interesting by not just reading and repeating his notes, everyday in class I learned more and more from him then I ever would have learned from reading the book or just taking notes. He proved to me that this is the type of major that I want to be a part of.

AVS 209

Dr. Doumit is extremely willing to help students out in any way he can. His expectations are straightforward and he teaches with a great sense of humor.

Dr. Doumit is always enthusiastic to help students and make sure they understand the materialboth in and out of the classroom. The material was presented in a way that was easy to understand, and I was constantly engaged in lectures and labs. Dr. Doumit genuinely cares about the success of his students, and even though he's not my academic advisor, he advised me on career decisions on multiple occasions.

Dr. Doumit is an amazing instructor. I could not have asked for a better professor to introduce me to my major. He teaches in a way that is easy for students to engage in and is interesting. I was always interested in learning, even if I thought I was well rehearsed in what we were talking about. The labs are always fun, and are the best labs I have all week...

AVS 263

Doumit is one of my favorite teachers. He is also so happy, so positive, and makes learning fun. I never want to skip any of his classes and always take so much away from his classes. I enjoy his teaching style and appreciate how much he cares about his students.

AVS 363

I love Dr. Doumit's attitude towards teaching the class. He always goes to class with a big smile on his face & excitement to get the class going. I also like how he included a student based on her culture. He said "chorizo" that made the Spanish speaking laugh by the way he said it. Dr. Doumit then asked the student to say it out loud for the class to hear. It shows to me that he encourages diversity in his class.

The instructor was funny, innovative and was always willing to help students when they didn't understand a concept that he was teaching in class. He was also super helpful to students outside of the AVS major when they had a question or concern about the class, especially during the lab when students had to work with knives and meat. Awesome material taught very well.

Composite Profile Factors						
Course	Instructor	Student	Student-Instr.	Course	Course	#
	Involvement	Interest	Interaction	<u>Demands</u>	Organization	<u>Resp.</u>
ANS 210 F, 2007	1.43	2.02	1.71	2.07	1.69	117
ANS 210 F, 2006	1.42	2.06	1.80	2.14	1.75	98
ANS 210 F, 2005	1.45	2.11	1.85	2.22	1.68	82
ANS 210 F, 2004	1.33	2.01	1.71	2.09	1.55	89
ANS 210 F, 2003	1.44	2.01	1.69	2.14	1.68	91
ANS 210 F, 2002	1.58	2.12	1.98	2.21	1.83	70
ANS 415 S, 2007	1.46	2.02	1.72	2.27	1.68	25
ANS 415 S, 2006	1.48	2.00	1.47	2.23	1.68	15
ANS 415 S, 2005	1.44	1.78	1.51	2.18	1.53	14
ANS 415 S, 2004	1.70	2.07	1.80	2.62	2.09	16
ANS 415 S, 2003	1.55	1.81	1.64	2.27	2.28	9
ANS 415 S, 2002	1.22	1.80	1.44	2.03	1.75	22
ANS 416 F, 2007	1.17	1.69	1.50	1.63	1.61	13
ANS 416 F, 2006	1.40	1.67	1.56	1.83	1.56	13
ANS 416 F, 2005	1.38	1.93	1.55	1.93	1.80	11
ANS 416 F, 2004	1.38	1.93	1.61	2.04	1.72	11
ANS 416 F, 2003	1.72	1.83	1.86	2.06	1.72	9
ANS 416 F, 2002	1.37	1.77	1.58	1.92	1.69	12

Instructor Performance Ratings, Michigan State University (2002 - 2007) Student Instructional Rating System based on a 1-5 scale, 1 being superior.

Invited/Guest Lectures and Teaching Service:

Two lectures, Beef Carcass Grading and Pricing, AVS 474, Spring, 2014

Two lectures, *Beef Quality* and *Management to Improve Quality Grade*, AVS 474, Spring, 2012 *Meat Quality*, FS 155 (WSU), Spring, 2012.

Meat Quality, FS 110, Fall, 2011.

Five 75 minute lectures on *Muscle Physiology*, AVS 504 (Advanced Physiology), Spring, 2011 Two lectures on *Beef Quality*, and *Management to Improve Beef Quality*, AVS 474, Spring, 2011 Two lectures on *Meat and the Meat Industry* in WSU AS 101, Fall, 2010, 2009.

Served as proctor for Ecology Online (REM 221-40), Fall, 2010.

Two lectures on *Overview of World and U.S. Beef Cattle Industries*, and *Beef Quality* in AVS 474, Spring, 2010.

The Meat Industry: Facts and Fundamentals in CORS 208, Spring, 2009.

Two lectures on Animal Growth in AVS 271 (Anatomy and Physiology), Fall, 2008.

Meat Animal Products in WSU AS 101, Fall, 2008.

Beef Carcass Evaluation in ANS 222, 3 labs, Spring, 2008.

Meat Animal Carcass Evaluation in ANS 110, 6 labs, Fall, 2004, 3 labs annually, 2005 to 2008.

Frontiers in Animal Growth in ANS 315, Spring 1999 to 2008.

Lamb Carcass Evaluation and Cuts in ANS 262, Spring 2005, 2006.

Pork Carcass Evaluation in ANS 211, Fall, 05, 06 Carcass data collection, 2000-2006.

Hog Slaughter in Biosystems Engineering (BE 478), Spring, 2006.

Two lectures on *Humane Slaughter* and *Meat Handling and Processing* in FSC 325, Fall, 2005. *Conversion of Muscle to Meat* in ANS 320, Spring, 2004.

- *Involvement of Proteases in Muscle Growth and Meat Tenderization*, 2.5 h lecture presented to graduate muscle biochemistry course at Purdue U., Spring, 2002.
- Meat Properties in ANS 425, Fall, 1999.
- Two lectures on Hormonal Regulation of Animal Growth in PSL 841, Fall, 1999.

PRESENTATIONS TO INDUSTRY, YOUTH, AND PROFESSIONAL GROUPS

Growth Promotants in the Beef Industry. Idaho Beef Summit. Pocatello, ID 1-18-14 University of Idaho Meat Science Teaching and Research Update. North Idaho Cattle

- Association Annual Meeting, Coeur D'Alene, ID 10-26-13.
- University of Idaho Sheep Update. Washington State Sheep Producers Meeting, Ritzville, WA, 10-25-13.
- Cattle Production Factors that Affect Beef Quality. Idaho Cattle Association Midyear Meeting, McCall, ID, 6-26-13.
- *Pork 300.* Provided instruction on live hog evaluation and pork carcass evaluation. Led pork carcass fabrication and cutting test. 6-21 and 6-22-13 (WSU campus).
- Pork Quality, Curing, and Restricted Ingredients. Northwest Meat Processors Association, Processed Meats Workshop. Moscow, ID 4-4-13.
- Life cycle of salmon. Troy, ID Elementary School. 3-1-13.
- Beef Carcass Quality. WSU Club Calf Sale, Pullman, WA, 10-27-2012.
- *Lamb 300*, participated with instruction on live lamb evaluation and carcass fabrication. 10-18 to 10-19-12. (WSU Campus)
- Assisting in the Transition from College to Career: Ideas for Academic Advisors. UI and WSU Advising Symposium. Joint presentation with Drs. Larry Makus and Bob Tripepi. 9-14-12.
- *Beef 300*, Participated as a lead instructor on *Market Cattle Evaluation, Beef Carcass Fabrication*, and *Tools to Measure Beef Quality*. 5-16 to 5-19-12 (Joint UI and WSU program).
- Improving Tenderness of Beef Bottom Round. Report to Idaho Beef Council Board. Boise, ID, 3-29-12.
- Raising a Quality Calf. Asotin County Cattlemen's Meeting, Asotin, WA, 1-31-12.
- Meat Science 101 for Ranchers, and Beef Carcass Grading. Idaho Beef Summit, Twin Falls, ID 1-6-12 and 1-7-12.
- Management to Improve Quality Grade in Cattle. Intermountain Range Livestock Symposium, Twin Falls, ID, Two sessions, 1-13-11.
- Beef 300, Participated as a lead instructor on Market Cattle Evaluation, Beef Carcass Fabrication, and Tools to Measure Beef Quality. Assisted with carcass grading. 1-5 to 1-8-11 (UI and WSU campuses).
- Breeding Gilt Selection presented to Ag Days participants (~36 youth), 9-17-10.

Research Proposal, Idaho Beef Council, Boise, ID, 6-1-10.

- Update on Current IBC-Funded Research, Idaho Beef Council, Boise, ID, 3-4-10.
- Meat Science Program, AVS Departmental Advisory Board Meeting, Caldwell, ID, 10-14-09.
- Market Cattle Evaluation presented to Ag Days participants (~20 youth), 10-2-09.
- *Beef 300*, participated with instruction on live cattle evaluation, carcass grading, and beef carcass fabrication. Led discussions of *Beef Carcass Evaluation* and *Tools to Measure Beef Quality*. 1-7 to 1-10-09 (UI and WSU campuses).
- Cured Meat Chemistry and Regulated Ingredients. Northwest Processed Meats Workshop. Moscow, ID 3-19-09.

- *Lamb 300*, participated with instruction on live lamb evaluation, carcass grading, and fabrication. Led discussions on lamb and carcass evaluation. 10-1 to 10-3-09. (WSU Campus)
- Effects of Fatty Acids on Differentiation of Bovine Preadipocytes from Intramuscular and Subcutaneous Fat Depots, Idaho Beef Council Board, 5-29-08. (Boise, ID)
- What's New at the University of Idaho Meat Lab?, North Idaho Cattle Association 2008 Annual Meeting, 9-20-08. (Worley, ID)
- Livestock Evaluation presented to Ag Days participants (23 youth), 10-3-08 (UI)

Provided input on lamb carcass evaluation and made presentation and meat cutting demonstration on *Wholesale and Retail Cuts of Lamb* to Washington Sheep Producers Association, ~70 participants, 11-1-08. (WSU)

- Idaho Beef Check-off: Enabling Research, Education, and Outreach at the University of Idaho, Idaho Cattle Association Annual Convention, 11-18-08. (Sun Valley, ID)
- Salmon Procurement for Smoking An Alaskan Perpective, Michigan Meat Association. East Lansing, MI 3/7/08.
- New Pork Products, Michigan Meat Association . East Lansing, MI 3/7/08.
- Beef Quality. Michigan Junior Beef Congress, MSU Campus 4/14/07.
- *Role of an Animal Science Department in the Land Grant Institution of the 21st Century.* North Dakota State University, Invited Seminar, Fargo, ND 12/20/06.
- *Cuts of Pork.* Pork carcass fabrication and discussion of cut identification and value. Youth Livestock Camp, Coldwater, MI 6/27/06 (90 min program, ~35 youth and adult leaders)
- Being Great at South Dakota State. SDSU, Invited Seminar, Brookings, SD 5/10/06
- Satellite cell proliferation and differentiation. University of Missouri, F21C Seminar, Columbia, MO 4/4/06
- *Friday night at the MSU meat laboratory- The Sequel.* Hog handling and slaughter, pork carcass evaluation and fabrication presentations to Green and White Expo attendees 2/4/06 (2 h program, ~85 youth and adults).
- Provided tours and discussion of MSU Meat Laboratory facilities to the following groups or individuals: 2007 Jones Dairy Farm, Academic visitors from Thailand; 2006: Brent Woodward (Merial), Student recruits (Brown, Wenner, Francis); Better Process Control School, 1999-2006; Minority Apprenticeship Program, 6/15/04; visitors from Ukraine, State Dept. and MSUE, 2/11/04; 4-H Youth Livestock Camp 2000-2003; Michigan Meat Processors, 3/12/99; Gordon Food Service, 12/17/99.
- *Highlights from a decade of porcine myogenic satellite cell research.* Genzyme Corporation. Cambridge, MA 5/23/05.
- *Friday night at the MSU meat laboratory.* Pork carcass evaluation and fabrication presentations to Green and White Expo attendees 2/4/05 (2 h program, ~100 youth and adults).
- *Meat quality and food safety.* 4-H Exploration Days 6/23-6/24, 2004 (5 contact hours, 17 youth).
- Beef Quality Grading. Certified Angus Beef Program (hosted at MSU, 3/28/03).
- *Biochemical and physical aspects of water holding capacity.* In symposium: *Pork quality measurement systems* sponsored by National Pork Board and American Meat Science Association, East Lansing, MI 8/1/02 (presented on behalf of Karl Honikel).
- *Recent studies on porcine muscle growth and meat quality.* Departmental Seminar, Food Science and Human Nutrition, MSU, 2/6/02.
- Pork quality. Pork 101, Sponsored by National Pork Board and hosted by MSU. 8/20/01.

- *Measuring carcass quality.* Pork 101, Sponsored by National Pork Board and hosted by MSU. 8/21/01.
- *Pork quality management at slaughter.* Pork 101, Sponsored by National Pork Board and hosted by MSU. 8/21/01.
- *Biochemical characterization of pork quality.* National Pork Board. Quality Solutions Team Meeting. Kansas City, MO 7/12/01.
- Lamb Wholesale and Retail Cut Identification and Cookery. Northern Exposure Club Lamb Classic. Ann Arbor, MI 7/7/01.
- *Growth, Composition and Meat Quality of Berkshire and Yorkshire-sired Pigs.* Regional Pork Industry Information Meeting. Jackson, MI 3/29/01.
- *Pork Quality Issues.* Michigan Meat Association "Back to Basics" Ham Curing Workshop. East Lansing, MI 3/9/01.
- *Characterization of Pork Loin Quality.* Monsanto/Dekalb Swine Genetics, St. Louis, MO 10/6/00.
- *pH and Pork Quality: Workshop Summary.* Pork Quality and Safety Summit sponsored by National Pork Producers Council. Des Moines, IA 7/12/00
- Beef Quality Grading. Certified Angus Beef Program (hosted at MSU, 4/28/00 and 10/2/00)
- Where do cuts of meat come from? Food Animal Club, MSU College of Veterinary Medicine (11/11/99)
- Beef tenderness: Why and How? Certified Piedmontese Beef Program, hosted at MSU, 10/30/99.
- *Regulation of muscle growth in pigs.* North Central Region-210 and 220 (joint meeting) regional research committees, hosted at MSU, 6/3/99.
- *Pork quality measurements.* Professional Swine Producers Symposium speaker, hosted at MSU, 2/4/99.
- *Beef Palatability:Beyond the Quality Grade*, Certified Piedmontese Beef Program. Provided Piedmontese breeders, packers and distributors information on the factors influencing palatability of beef, hosted at MSU, 11/6/98.
- *Factors affecting the tenderness of beef*, North Central Region-185 regional research committee, hosted at MSU, 6/11/98.
- Where meat really comes from, 1997 Pork Career Fair and Industry Training Day, 2/7/97.

Mad Cow Disease, 1997 Michigan Meat Association Convention, 3/7/97.

Use of immunological methods to examine skeletal muscle growth and meat tenderness, to Dept. of Animal and Range Sciences, South Dakota State University, 9/95.

TEACHING GRANTS AWARDED at UI

Development of livestock and carcass evaluators to serve Idaho. M.E. Doumit (PI, 100% spending authority) and R.P. Richard. Idaho Beef Council. \$7,757 funded 7-2013 and 7-2014; Separate grant requests to this agency supported students in intercollegiate livestock judging and meat animal evaluation in 2012 (\$9,052), 2011 (\$24,420) and 2010 (\$27,000).

I view academic research as an opportunity to effectively train the next generation of scientists as part of a multi-disciplinary team, while generating information to address practical problems for industry and society. Such research also enhances my subject-matter expertise in the classroom and teaching laboratory. I have served on the guidance committees for 30 graduate students working in a variety of disciplines, in addition to the 13 graduate students I have mentored as a major professor. My laboratory has also employed 39 undergraduate students,

including 25 students since my arrival at the University of Idaho in 2008. One of my employees, Jackie Owens, was 2nd Runner Up as UI Student Employee of the Year in 2010. I also served as a mentor for a McNair Scholar (Audra Henderson) in 2011. While not a formal teaching responsibility, I believe this provides students unique intellectual, experiential, and financial benefits.

Statement on Teaching Philosophy and Goals.

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Strong educational programs are the foundation of academic institutions. The academic profession, whether one's mission is teaching, research, or outreach, is about having a **passion for helping people**, and providing them with the inspiration and knowledge to help themselves and others for the rest of their lives. My goal is to instill in students an interest in lifelong learning and the ability to use knowledge to improve and enrich lives.

My approach to teaching is fairly simplistic. As an instructor, I attempt to **provide the best information available** in a manner that will stimulate thought, inquiry, application of knowledge, and enthusiasm for subject matter. For each student, I want the educational experience to be interesting, memorable, relevant and useful.

In addition to providing technical information, I try to convey to students, both blatantly and covertly, that **honesty** and **humility** are essential for self-respect and to warrant the respect of others. I suggest that to be successful in school and in life, individuals must be 1) **present**, not just in body, but be engaged and attentive, 2) **prepared**, through hard work, close observation and clear thinking, 3) **positive**, because attitude makes a difference, and 4) **passionate**, because if you love what you do, you will most likely do it well. I feel extremely fortunate to have a job that I love to do, and the ability to perform my duties reasonably well.

I attempt to get to **know my students**. This is facilitated in classes with sizeable (~100 or more) enrollment by interactive lectures and laboratory experiences. Getting to know students' names, interests and goals is an important component of my teaching approach. By demonstrating a sincere interest in students, I build trust, mutual respect and a rapport with students, which allows them to more comfortably interact with me and their peers in and out of the classroom. This approach facilitates learning by improving communication and invariably leads to more candid feedback for course improvement. I frequently ask questions in class to stimulate critical thinking and application of the information presented. Student responses allow me to determine if concepts are being understood. Having knowledge of the students' backgrounds also allows me to call upon students to share their specific experiences or skills with their peers when appropriate. From my perspective, a class of 100 college students may have approximately 2000 years of experience to draw upon!

Effective teaching requires **continual process improvement.** I encourage students to ask questions and informally provide feedback on course content and delivery, and they generally do. I also request anonymous written feedback on a sheet that may be detached from the second lecture quiz or first exam in a course. I discuss this feedback with the class and often modify course content or my delivery based on student comments. Students gain a sense of ownership when their input is seriously considered, and they seem to put forth more effort. Periodically, I ask students to critique the syllabus at the end of the semester. This often leads to suggestions that I use to improve the course the next year. I strive to continuously improve my teaching effectiveness using the strategies described above, careful reading of formal student evaluations,

techniques that I learn from faculty development programs, and tips that I experiment with from books on teaching, such as 147 Practical Tips for Teaching Professors by Robert Magnan.

Reflection of Growth as a Teacher over Time

When given my first teaching assignment as a graduate student in 1987, I was, quite frankly, terrified. Over time, most of the fear passed and I became focused on presenting the most current information possible, and ensuring that I was an expert on the subject I was trying to convey. I believe that my youth was a benefit in establishing a rapport with students. Over the past twenty-five years, I have grown more comfortable in the classroom, and the laboratory, and the meat processing facility, and the farm, and the grocery store, and the club meetings, and the multitude of other places where I can capture the "teachable moments." I still aspire to convey the most current and relevant information. However, my youth has been replaced by experience and hopefully some wisdom. My challenge is frequently to focus on the information and experiences that are most worthwhile to share, and finding the most effective ways to tell the story. I truly enjoy the challenge of providing information in ways that will be most easily grasped, remembered and applied. I've become much more aware of the different challenges that individual students face, both in and outside the classroom. My hope is that I've become more compassionate and understanding, while still maintaining high expectations. I've learned that enthusiasm for the subject matter and genuine interest in each student's progress and wellbeing are suitable replacements for my lost youth when it comes to establishing a rapport with students. Having knowledge of a student's background, interests, and challenges is key to engaging the student in a positive learning environment and eliminating many of the barriers that impede their progress. Since I began teaching, I've been thrilled to see students succeed and to watch the "light come on" when a student or a classroom full of students "gets it." These are among the most rewarding things in our profession and the thrill of teaching is one I hope never to outgrow.

ADVISING

Approximate Number of Undergraduate Students Advised, University of Idaho

43 students	2013	42 students	2012
36 students	2011	36 students	2010
28 students	2009	13 students	2008

Graduate Students Advised as Major Professor at University of Idaho

Matthew Colle, M.S. Current

Michael Colle, M.S. Current, Outstanding AVS Graduate Student, 2013.

Aaron R. Gray, M.S. Current

Will Loucks, M.S. Current

Lauren C. Davis, M.S. 2011. Effects of long-chain fatty acids on differentiation of bovine preadipocytes from intramuscular and subcutaneous fat depots. Outstanding AVS Graduate Student, 2010. Current Position, Research Tech., Novartis, San Diego, CA

Graduate Students Advised as Major Professor at Michigan State University

- Chuck P. Allison, Ph.D. 2004. Use of halothane gas to identify pigs with novel polymorphisms in the skeletal muscle calcium release channel. Current position: Director of Pork Quality, Smithfield Foods, Smithfield, VA.
- Nicholas L. Berry, M.S. 2003. Relationship between glycolytic oscillations and pork color and water-holding capacity. Ph.D. (Iowa State). Current position: Pork Enterprise Group, Cargill.
- Jason M. Scheffler, M.S. 2002. Feedlot performance, carcass attributes, and satellite cell activity of Holstein steers treated with combination trenbolone acetate and estradiol implants. Ph.D. (Nebraska), Current position: Post-Doc in Animal Science at Virginia Tech.
- Matthew J. Ritter, M.S. 2002. Outstanding Graduate Instructor in Animal Science in 2001. Carcass, meat quality and biochemical traits of Berkshire and Yorkshire progeny with or without Paylean® treatment. Ph.D. (Illinois). Current position: Director, Swine Product Development, Elanco Animal Health.
- Chuck P. Allison, M.S. 2001. Characterization of postmortem factors regulating pork color, water holding capacity and tenderness. See above for Ph.D. project information.
- John D. Heller, M.S. 2000. Effects of callipyge lamb genotype on skeletal muscle characteristics. Current position: Sales Director, Neogen, Lansing, MI.
- Nicholas T. Mesires, M.S. 2000. Graduate Student Teaching Award, Food Science and Human Nutrition in 1999. Satellite cell proliferation and differentiation during postnatal growth of porcine skeletal muscle. Ph.D in Physiology, Sackler School of Graduate Biomedical Sciences, Tufts University, Current position: Maine Medical Research Institute.

Served as Dissertation Advisor

Scott A. Kramer, Ph.D. 1998 β -Adrenergic stimulation increases protein phosphorylation and skeletal muscle α -actin mRNA abundance in C₂C₁₂ myotubes.

Served as Guidance Committee Member, *Research Advisor

Shuhan Ji	Shuhan Ji Ph.D Current Adipocyte Biology		Adipocyte Biology	
Jessica Macumber	M.S.	Current	Growth Physiology	
Tiffany Skow	Ph.D.	Current	Beef Production/Quality	
Suresh Acharya	Ph.D.	2013	Molecular Biology/Beef Quality	
Kara Thornton	Ph.D.	2013	Growth Physiology	
Pahlavi Cheguru	Ph.D.	2011	Growth Physiology/Adipocyte Biology	
Ting Jiang	Ph.D.	2011	Meat Science (Washington State)	
Ig Seo Choi	Ph.D.	2011	Animal Science/Molecular Genetics (Michigan State)	
Alicia Ewing	M.S.	2010	10 Ruminant Nutrition/Beef Quality	
Vareemon Tuntivanich	Ph.D.	2007	Food Science & Human Nutrition/Meat Safety	
Hyo-Jung Yoon Ph.D. 2006 Food Science & Human Nutrition/Muscle Biod		Food Science & Human Nutrition/Muscle Biochem.		
Barry Bradford Ph.D. 2006 Animal Science/Ruminant Nutrition		Animal Science/Ruminant Nutrition		
*Guillermo Ortiz-Colon	Ph.D.	2006	Animal Science/Ruminant Nutrition-Adipocyte Biol.	
Laurie Davis	Ph.D.	2005	Animal Science/Lactation Physiology	
Dave Edwards	Ph.D.	2005	Animal Science/Molecular Genetics	
Tracy Copenhafer	M.S.	2005	Animal Science/Meat Science (Purdue University)	
*Aaron Grant	Ph.D.	2005	Animal Science/Ruminant NutrAdipocyte Biol.	
Cassie Abney	M.S.	2004	Animal Science/Ruminant Nutrition	

Doumit, Matthew E.

Valencia Rilington	M.S.	2004	Animal Science/Molecular Genetics
Mike Rincker	Ph.D.	2004	Animal Science/Swine Nutrition
Deanna Bloom-Hofing	M.S.	2003	Animal Science/Meat Science
Jennifer Wells Jacob	Ph.D.	2003	Animal Science/Animal Health
Matt McCurdy	M.S.	2002	Animal Science/Ruminant Nutrition-Fat Deposition
Melvin Pagan	Ph.D.	2002	Animal Science/Molecular Genetics
Luis Silva	Ph.D	2002	Animal Science/Nutrition-Mammary Gland Biology
Isam M. Quahwash	M.S.	2001	Animal Science/Physiology
Haiyan Zhang	M.S.	2000	Food Science & Human Nutrition/Muscle Biochem.
Jennifer Barker	M.S.	1999	Animal Science/Ruminant Nutrition
Michael Schlegel	Ph.D.	1999	Animal Science/Ruminant Nutrition
Yan Yuan	M.S.	1999	Animal Science/Behavior

SCHOLARSHIP:

Summary of Publications						
	2008-2013	Career				
Book, Book Chapters, Educational Works		5				
Refereed Publications	11	32				
Invited Proceedings Papers	1	7				
Abstracts	16	73				
Research Reports	10	18				
Popular Press		1				

Publications:

Book/Educational Works

- Boggs, D.L., R.A. Merkel, M.E. Doumit and K.W. Bruns. 2006. Livestock and Carcasses: An Integrated Approach to Evaluation, Grading, and Selection. (Sixth Ed.) Kendall/Hunt Publishing Co., Dubuque, Iowa.
- Doumit, M.E. and R.A. Merkel. 2005. Growth and development: Postnatal. Encyclopedia of Animal Science, 513-516.
- Merkel, R.A. and M.E. Doumit. 2005. Growth and development: Mammalian fetus. Encyclopedia of Animal Science, 510-512.
- Allison, C.P., M.J. Ritter, M.E. Doumit and D. Meisinger. 2001. pH: The implications for pork quality. Includes a set of 71 slides and detailed script available on compact disc from the National Pork Board and American Meat Science Association. MED contracted to develop.
- Boggs, D.L., R.A. Merkel and M.E. Doumit. 1998. Livestock and Carcasses: An Integrated Approach to Evaluation, Grading, and Selection. (Fifth Ed.) Kendall/Hunt Publishing Co., Dubuque, Iowa.

Refereed Publications

- M.J. Colle, R.P. Richard, K.M. Killinger, J.C. Bohlscheid, A.R. Gray, W.I. Loucks, R.N. Day, A.S. Cochran, J.A. Nasados, and M.E. Doumit. 2014. Influence of extended aging on beef quality characteristics and sensory perception of steaks from the *gluteus medius* and *longissimus lumborum*. Meat Science. Submitted
- Ji, S., M.E. Doumit, and R.A. Hill. 2014. Regulation of adipogenesis and key adipogenic gene expression by 1, 25-dihydroxyvitamin D in 3T3-L1 cells. Eur. J. Physiol. Submitted
- Nelson, M.L. J. Busboom, M. Heitstuman, S. Kerr, S. Neibergs, J. Schmidt, S. Smith, M. Doumit, J. Hermes, and R. Richard. 2014. WSU meat animal evaluation, analysis and technology team adding value to meat products from farm to table: a model of successful extension programming. Journal of Extension. Submitted
- Thornton, K.J., R.P. Richard, M.J. Colle, M.E. Doumit, M.J. de Veth, C.W. Hunt, G.K. Murdoch. 2014. Effects of dietary potato by-product and rumen-protected histidine on growth, carcass 2 characteristics and meat color of beef. Meat Science. Submitted
- Choi, S.H., D.T. Silvey, B.J Johnson, M.E. Doumit, K.Y Chung, J.E. Sawyer, G.W. Go, and S.B. Smith. 2014. Conjugated linoleic acid (t-10, c-12) reduces fatty acid synthesis de novo, but not expression of genes for lipid metabolism in bovine adipose tissue ex vivo. Lipids 49:15-24. Epub 2013, Nov 30 doi:10.1007/s11745-013-3869-0
- Bates, R.O., M.E. Doumit, N.E. Raney, E.E. Helman, and C.W. Ernst. 2012. Association of halothane sensitivity with growth and meat quality in pigs. Animal 6:1537-1542.
- Cheguru, P., K.C. Chapalamadugu, M.E. Doumit, G.K. Murdoch, and R.A. Hill. 2012. Adipocyte differentiation-specific gene transcriptional response to C18 unsaturated fatty acids plus insulin. Pflugers Arch. 463:429-447
- Thornton K.J., C.M. Welch, L.C. Davis, M.E. Doumit, R.A. Hill, and G.K. Murdoch. 2012. Bovine sire selection based on maintenance energy affects muscle fiber type and meat color of F1 progeny. J. Anim. Sci. 90:1617-1627.
- Welch C.M., J.K. Ahola, J.B. Hall, G.K. Murdoch, D.J. Crews Jr., L.C. Davis, M.E. Doumit, W.J. Price, L.D. Keenan, and R.A. Hill. 2012. Relationships among performance, residual feed intake, and product quality of progeny from Red Angus sires divergent for maintenance energy EPD. J. Anim. Sci. 90:5107-5117.
- Bates, R.O., D.B. Edwards, C.W. Ernst, M.E. Doumit, and M.D. Hoge. 2011. Influence of finishing environment on pig growth performance and carcass merit. J. Swine Health Prod. 19(2):86-93.
- McDaneld, T.G., T.P Smith, M.E. Doumit, J.R. Miles, L.L. Coutinho, T.S. Sonstegard, L.K. Matukumalli, D.J. Nonneman and R.T. Wiedmann. 2009. MicroRNA transcriptome profiles during swine skeletal muscle development. BMC Genomics. 10:77-87.
- Ortiz-Colon, G., A.C. Grant, M.E. Doumit and D.D. Buskirk. 2009. Bovine intramuscular, subcutaneous, and perirenal preadipocytes express similar glucocorticoid receptor isoforms, but exhibit different adipogenic capacity. J. Anim. Sci. 87:1913-1920.
- Edwards, D.B., C.W. Ernst, N.E. Raney, M.E. Doumit, M.D. Hoge and R.O. Bates. 2008. QTL mapping in an F2 Duroc x Pietrain resource population: II. Carcass and meat quality traits. J. Anim. Sci. 86:254-266.
- Grant, A.C., G. Ortiz-Colón, M.E. Doumit, R.J. Tempelman, and D.D. Buskirk. 2008. Differentiation of bovine intramuscular and subcutaneous stromal-vascular cells exposed to dexamethasone and troglitazone. J. Anim. Sci. 86:2531-2538.
- Grant, A.C., G. Ortiz-Colon, M.E. Doumit and D.D. Buskirk. 2008. Optimization of in vitro

conditions for bovine subcutaneous and intramuscular preadipocyte differentiation. J. Anim. Sci. 86:73-82.

- Allison, C.P., A.L. Marr, N.L. Berry, D.B. Anderson, D.J. Ivers, L.F. Richardson, K. Keffaber, R.C. Johnson and M. E. Doumit. 2006. Effects of halothane sensitivity on mobility status and blood metabolites of HAL-1843-normal pigs following rigorous handling. J. Anim. Sci. 84:1015-1021
- Allison, C.P., R.C. Johnson and M.E. Doumit. 2005. The effects of halothane sensitivity on carcass composition and meat quality in HAL-1843-normal pigs. J. Anim. Sci. 83:671-678.
- Allison, C.P., R.O. Bates, A.M. Booren, R.C. Johnson and M.E. Doumit. 2003. Pork quality variation is not explained by glycolytic enzyme capacity. Meat Science 63:17-22.
- Scheffler, J.M., D.D. Buskirk, S.R. Rust, J.D. Cowley and M.E. Doumit. 2003. Effect of repeated administration of combination estradiol and trenbolone acetate implants on growth, carcass traits and beef quality of long-fed Holstein steers. J. Anim. Sci. 81:2395-2400.
- Mesires, N.T and M.E. Doumit. 2002. Satellite cell proliferation and differentiation during postnatal growth of porcine skeletal muscle. Am. J. Physiol. Cell Physiol. 282:C899-C906.
- Barker-Neff, J.M., D.D. Buskirk, J.R. Black, M.E. Doumit and S.R. Rust. 2001. Biological and economic performance of early-weaned Angus steers. J. Anim. Sci. 79:2762-2769.
- Doumit, M.E. and M. Koohmaraie. 1999. Immunoblot analysis of calpastatin degradation: evidence for cleavage by calpain in postmortem muscle. J. Anim. Sci. 77:1467-1473.
- Fligger, J.M., P.V. Malven, M.E. Doumit, R.A. Merkel and A.L. Grant. 1998. Increases in insulin-like growth factor binding protein-2 accompany decreases in proliferation and differentiation when porcine muscle satellite cells undergo multiple passages. J. Anim. Sci. 76:2086-2093.
- Dodson, M.V., D.C. McFarland, A.L. Grant, M.E. Doumit, and S.G. Velleman. 1996. Extrinsic regulation of domestic animal-derived satellite cells. Domest. Anim. Endocrinol. 13:107-126. (review)
- Doumit, M.E., D.R. Cook, and R.A. Merkel. 1996 Testosterone up-regulates androgen receptors and decreases differentiation of porcine skeletal muscle satellite cells *in vitro*. Endocrinology 137:1385-1394.
- Doumit, M.E., S.M. Lonergan, J.R. Arbona, J. Killefer, and M. Koohmaraie. 1996. Development of an enzyme-linked immunosorbent assay (ELISA) for quantification of skeletal muscle calpastatin. J. Anim. Sci. 74:2679-2686.
- Koohmaraie, M., M.E. Doumit, and T.L. Wheeler. 1996. Meat toughening does not occur when rigor shortening is prevented. J. Anim. Sci. 74:2935-2942.
- Dodson, M., D. McFarland, E. Bandman, W. Dayton, Z. Yablonka-Reuveni, E. Greene, M. Doumit, W. Bergen, R. Merkel, J. Vierk, S. Velleman, and J. Koumans. 1995. Status of satellite cell research in agriculture. Basic Appl. Myol. 5:5-9. (review)
- Koohmaraie, M., S.D. Shackelford, T.L. Wheeler, S.M. Lonergan, and M.E. Doumit. 1995. A muscle hypertrophy condition in lamb (callipyge): characterization of effects on muscle growth and meat quality traits. J. Anim. Sci. 73:3596-3607.
- Cook, D.R., M.E. Doumit and R.A. Merkel. 1995. Ractopamine, cAMP, and forskolin enhance the mitogenic activity of platelet-derived growth factor-BB on cultured porcine satellite cells. Basic Appl. Myol. 5:57-64.
- Doumit, M.E., D.R. Cook and R.A. Merkel. 1993. Fibroblast growth factor, epidermal growth factor, insulin-like growth factors and platelet-derived growth factor-BB stimulate

proliferation of porcine myogenic satellite cells *in vitro*. J. Cell. Physiol. 157:326-332. Cook, D.R., M.E. Doumit and R.A. Merkel. 1993. Transforming growth factor-beta-1,

- fibroblast growth factor and platelet-derived growth factor-BB interact to affect porcine satellite cell proliferation *in vitro*. J. Cell. Physiol. 157:307-312.
- Doumit, M.E. and R.A. Merkel. 1992. Conditions for isolation and culture of porcine myogenic satellite cells. Tissue Cell 24:253-262.
- Minshall, R.D., D.C. McFarland and M.E. Doumit. 1990. Interaction of insulin-like growth factor I with turkey satellite cells and satellite cell-derived myotubes. Dom. Anim. Endocrinol. 7:413-424.
- Doumit, M.E., D.C. McFarland and R.D. Minshall. 1990. Satellite cells of growing turkeys: Influence of donor age and sex on proliferation and differentiation *in vitro*. Exp. Cell Res. 189:81-86.
- McFarland, D.C., M.E. Doumit and R.D. Minshall. 1988. The turkey myogenic satellite cell: optimization of *in vitro* proliferation and differentiation. Tissue Cell 20:899-908.

Other:

Invited Presentations/Proceedings Papers

- Doumit, M. E., D.D. Buskirk, A.C. Grant, and G. Ortiz-Colon. 2009. Comparison of Intramuscular and Subcutaneous Preadipocytes. Proc. 62nd Annual Reciprocal Meat Conf.
- Doumit, M.E., N.L. Berry, E.E. Helman, C.P. Allison. 2004. Relationship between glycolytic oscillations and pork color and water-holding capacity. Proc. Pork Quality & Safety Summit. National Pork Board. Des Moines, IA 8/17/04. Presentation was made by N. Berry (former MS student) due to death in Doumit family.
- Edwards, D.B., M.E. Doumit, C.W. Ernst and R.O. Bates. 2004. Influence of finisher facilities on pig growth performance. National Swine Improvement Federation Proceedings. 121-128. available at http://www.nsif.com/Conferences/2004/contents.html
- Doumit, M.E., C.P. Allison, E.E. Helman, N.L. Berry, M.J. Ritter. 2003. Biological basis for pale, soft and exudative pork. Proc. Reciprocal Meat Conf. 56:9-15. Available at: <u>http://www.meatscience.org/Pubs/rmcarchv/2003/index.html#</u> Presented in Columbia, MO, 6/17/03
- Doumit, M.E., M.J. Ritter, C.P. Allison and R. Elmar-Dziambor. 2002. Biochemical characterization of pork quality. Proc. Pork Quality & Safety Summit (National Pork Board), p 119-123. Presented in Des Moines, IA 7/18/02.
- Doumit, M.E., C.P. Allison and M.J. Ritter. 2001. Control of glycolysis in relation to pork quality traits. Invited paper in symposium: *Beyond pH: Metabolic factors affecting pork quality*. Proc. Reciprocal Meat Conf. 54:155-157. Sponsored by National Pork Board and American Meat Science Association, Indianapolis, IN 7/28/01.
- Smith, D.M. and M.E. Doumit. 1999. Similarities and differences between avian and mammalian muscle in growth and processing. Proc. Reciprocal Meat Conf. 52:73-74. Oklahoma State University, Stillwater, OK 6/22/99.

Invited Presentations/Abstracts

- Doumit, M.E., N.T. Mesires, J.M. Scheffler, E.E. Helman. 2005. Satellite cell proliferation and differentiation. Presented at 2005 MWASAS Physiology symposium on Growth Physiology: Muscle Development. 3/22/05. J. Anim. Sci. 83 (Suppl. 2):85
- Buege, D.R., M.E. Doumit, J.G. Sebranek, D.N. Marple and D.J. Meisinger. 2002. Pork muscle profiling: Determining the properties of individual ham and shoulder muscles. Proc. Pork Quality & Safety Summit (National Pork Board), p 85. Sponsored by National Pork Board. Des Moines, IA 7/18/02.

Abstracts/Proceedings

Peer Reviewed/Evaluated Abstracts

- Colle, M.J., A.R. Gray, R.N. Day, W.I. Loucks, H.A. Sutton, J.A. Nasados, A.S. Cochran, R.P. Richard, and M.E. Doumit. 2014. Influence of extended aging on Warner-Bratzler shear force and sensory perception of four beef muscles. Proc. 2014 Reciprocal Meat Conf., 58.
- Tsai, C.Y., C. M. Scholte, J. M. Chilson, K. C. Ramsey, M. E. Doumit, and P. Rezamand. 2014. The effect of dietary saturated and unsaturated fatty acid on gene expression and fatty acid composition of serum, adipose and liver lipid fractions in pre-ruminant calves. Pacific Northwest Nutrition Conference.
- Colle, M.J., A.R. Gray, R.N. Day, W.I. Loucks, H.A. Sutton, J.A. Nasados, A.S. Cochran, R.P. Richard, and M.E. Doumit. 2013. Consequences of extended aging on retail shelf-life of four beef muscles. Proc. 2013 Reciprocal Meat Conf., p. 84. First Place in Graduate Student Poster Competition
- Thornton, K. J., M. J. Colle, J. A. Macumber, M. E. Doumit, R. Richard, C. W. Hunt, and G. K. Murdoch. 2013. Growth, carcass traits and meat color stability in steers finished on a potato-based versus a corn-based ration. J. Anim. Sci. 91(E-Suppl. 2):157.
- Colle, M.J., J. A. Nasados, L. C. Davis, R. N. Day, A. R. Gray, C. M. Welch, N. F. Elliott, A. S. Henderson, W. I. Loucks, H. M. Mitchell, R. P. Richard, M. E. Doumit. 2012. Consumer acceptability of beef bottom round steaks treated with calcium chloride and bromelain. Proc. 2012 Reciprocal Meat Conf., p. 65.
- Thornton, K.J., K.C. Chapalamadugu, M.E. Doumit, G.K. Murdoch. Satellite cell expression of myogenic regulatory factors is altered when co-cultured with preadipocytes. Experimental Biology, April 2012, San Diego, Ca. Poster Presentation.
- Welch, C.M., J. K. Ahola, G. K. Murdoch, D. H. Crews, J.I. Szasz, L. C. Davis, M. E. Doumit, W. J. Price, L. D. Keenan, and R. A. Hill. 2012. Performance, residual feed intake, and carcass quality of progeny from Red Angus sires divergent for maintenance energy EPD. J. Anim. Sci. 90(E-Suppl. 3):679.
- Davis, L.C., J.L. Owens, G.K. Murdoch, R.A. Hill, and M.E. Doumit. 2011. Specific long-chain fatty acids preferentially induce differentiation of bovine intramuscular or subcutaneous preadipocytes. Proc. Reciprocal Meat Conf. 64:2.
- Nasados, J.A., L.C. Davis, R.N. Day, N.F. Elliot, S.L. King, W.I. Loucks, D.A. Richards, B.D. Enger, I.J. Bridges, R.P. Richard, and M.E. Doumit. 2011. Improving tenderness of beef bottom round steaks with exogenous proteases and calcium chloride. Proc. Reciprocal Meat Conf. 64:44.
- Bates, R.O., M.E. Doumit, N.E. Raney, E.E. Helman and C.W. Ernst. 2010. Influence of halothane sensitivity on growth and meat quality in pigs. J. Anim. Sci. 88(E-Suppl. 3).

- Cheguru, P., M.E. Doumit, G. Murdoch, and R.A. Hill. 2010. Effect of fatty acids on adipocyte differentiation specific gene expression. J. Anim. Sci. 88(E-Suppl. 2):758.
- Silvey, D.T., G. Go, L.A. Gilmore, S.B. Smith, B.J. Johnson, and M.E. Doumit. 2010. Interactions between animal age and media fatty acids on subcutaneous and intramuscular adipose tissue explants from Angus steers. J. Anim. Sci. 88(E-Suppl. 2):835.
- Thornton, K.J., L. Davis, C. Welch, M. Doumit, R. Hill, C. Schneider, G.K. Murdoch. Muscle fiber type is altered by selection of sire for maintenance energy. PNAN, October 2010, Vancouver, BC, CA.
- Doumit, M.E. and C.P. Allison. 2009. Isoelectric Point Demonstration. Proc. 62nd Annual Reciprocal Meat Conf. Included in session on Innovative Teaching Techniques.
- Ewing, A.E., J.K. Ahola, M.E. Doumit, and C.W. Hunt. 2009. Pre-harvest feeding, feeding duration, and inclusion of a β-agonist on market dairy cow feedlot performance and carcass characteristics. Proceedings paper, 42nd Annual Meeting of the American Association of Bovine Practitioners, Omaha, NE.
- Choi, I.S., R.O. Bates, N.E. Raney, D.B. Edwards, M.E. Doumit and C.W. Ernst. 2008.
 Confirmation of quantitative trait loci for carcass and meat quality traits on pig chromosome 6 in a Duroc x Pietrain resource population. J. Anim. Sci. 86(Suppl. 2):363.
- Prasongsook, S., R.O. Bates, I.S. Choi, V.S. Rilington, N.E. Raney, C.C. Beattie, M.E. Doumit and C.W. Ernst. 2008. Association of insulin-like growth factor binding protein 2 genotypes with growth, carcass and meat quality traits in pigs. J. Anim. Sci. 86(Suppl. 3):51.
- Varnes, B.L., E.E. Helman, C.W. Ernst, J.W. Reum, R.J. Tempelman, A.M. Ramos and M.E. Doumit. 2008. Changes in myoblast activity during pig development are not explained by inherent differences in phenotype or global gene expression patterns. J. Anim. Sci. 86(Suppl. 3):125.
- Choi, I.S., R.O. Bates, V.D. Rilington, D.B. Edwards, N.E. Raney, M.E. Doumit and C.W. Ernst. 2007. Association between corticotropin-releasing hormone receptor 2 genotypes and meat quality traits in pigs. J. Anim. Sci. 85(Suppl. 2):65.
- Edwards, D.B., C.W. Ernst, N.E. Raney, M.E. Doumit, M.D. Hoge and R.O. Bates. 2006. QTL mapping in an F₂ Duroc x Pietrain resource population: II. Carcass and meat quality traits. J.Anim. Sci. 84(Suppl. 2):49.
- Helman, E.E., C.S. Quinlan, N.L. Berry, C.S. Abney, C.P. Allison, S.R. Rust, W.N. Osburn and M.E. Doumit. 2006. Qualitative characteristics of beef value cuts from Holstein and Angus cattle. Proc. Reciprocal Meat Conf. 59:13.
- Ortiz-Colon, G., A.C. Grant, M.E. Doumit, and D.D. Buskirk. 2006. Differences in adipogenesis between bovine intramuscular and subcutaneous preadipocytes are not related to expression of PPAR γ_2 or secretion of PGI₂. J. Anim. Sci. 84(Suppl. 1):28.
- Ortiz-Colon, G., A.C. Grant, M.E. Doumit, and D.D. Buskirk. 2006. The adipogenic enzymatic activity of bovine intramuscular, perirenal, and subcutaneous cultured preadipocytes differs, and increases in all depots following exposure to dexamethasone. J. Anim. Sci. 84(Suppl. 1):144.
- Wiedmann, R.T., M.E. Doumit, L.K. Matukumalli, T.S. Sonstegard, L.L Coutinho, D. Nonneman, and T.P.L. Smith. 2006. Expression profiles of micro-RNAs in swine muscle development. Intl. Soc. Anim. Gen. 30:70 (http://www.isag.org.uk/pdf/2006ISAG_Proceedings.pdf).
- Copenhafer, T., B. Richert, A. Schinckel, M. Doumit, A. Grant and D. Gerrard. 2005. Glycogen

phosphorylase drives early post mortem metabolism in porcine muscle. Intl. Cong. Meat Sci. and Tech. 51:121.

- Edwards, D.B., M.E. Doumit, C.W. Ernst and R.O. Bates. 2005. Influence of finisher facilities on growth performance. J.Anim. Sci. 83:55.
- Allison, C.P., R.C. Johnson and M.E. Doumit. 2004. The effects of halothane sensitivity on carcass composition and meat quality in HAL-1843-free pigs. J. Anim. Sci. 82(Suppl. 2):58.
- Allison, C.P., A.L. Marr, N.L. Berry, D.B. Anderson, D.J. Ivers, L.F. Richardson, K. Keffaber, R.C. Johnson, M.E. Doumit. 2004. Impact of halothane sensitivity on mobility status and blood metabolites of HAL-1843-free pigs following an aggressive handling model. J. Anim. Sci. 82(Suppl. 2):33.
- Bach, L.H., N.E. Raney, M.E. Doumit, E.E. Helman, S. Zhao, C.K. Tuggle, C.W. Ernst. 2004. Differential gene expression in proliferating and differentiating porcine skeletal muscle satellite cells. J. Anim. Sci. 82(Suppl. 2):107.
- Berry, N.L., E.E. Helman, C.P. Allison, and M.E. Doumit. 2004. Relationship between glycolytic oscillations and pork color and water-holding capacity. J. Anim. Sci. 82(Suppl. 2):59.
- Grant, A.C., G. Ortiz-Colon, M.E. Doumit, D.D. Buskirk. 2004. A procedure for the isolation, culture, and cloning of bovine preadipocytes. J. Anim. Sci. 82(Suppl. 2):53.
- Ortiz-Colon, G., A.C. Grant, M.E. Doumit, D.D. Buskirk. 2004. Clonal efficiency and adipogenic capacity of preadipocytes isolated from bovine intramuscular, perirenal, and subcutaneous adipose tissue. J. Anim. Sci. 82(Suppl. 2):53.
- Beuge, D., J. Sebranek, M. Doumit, D. Marple, D. Ahn, E. Huff-Lonergan, S. Lonergan, C. Fedler, K. Prusa, E. Helman, D. Meisinger. 2003. Pork Muscle Profiling. Proc. Reciprocal Meat Conf. 56:51-52. Available at: http://www.meatscience.org/Pubs/rmcarchv/2003/index.html#
- Ritter, M.J., C.P. Allison, N.L. Berry, R.O. Bates, G.M. Hill and M.E. Doumit. 2003. Effects of Paylean on growth, carcass and meat quality traits of Berkshire and Yorkshire progeny. J. Anim. Sci. 81(Suppl. 2):50.
- Allison, C.P., M.J. Ritter and M.E. Doumit. 2002. Techniques for quantification of loin muscle water-holding capacity. Invited paper in symposium: *Pork quality measurement systems*. Proc. Reciprocal Meat Conf. 55.
- Grobbel, J.P., A.M. Booren, R.J. Tempelman and M.E. Doumit. 2002. Comparison of cooking and shearing methods for evaluating tenderness of beef strip loin steaks. Proc. Reciprocal Meat Conf. 55.
- Ritter, M.J., C.P. Allison and M.E. Doumit. 2002. Use of Paylean to increase lean yield of high quality pork. Proc. Reciprocal Meat Conf. 55.
- Scheffler, J.M., N.T. Mesires and M.E. Doumit. 2002. Quantification of myogenin-positive satellite cells from bovine skeletal muscle. J. Anim. Sci. 80 (suppl. 1):154.
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Thesis/Dissertation

- Doumit, M.E. 1994. Effects of testosterone on proliferation, differentiation and androgen receptor content of porcine satellite cells *in vitro*. Ph.D. Dissertation, Michigan State University, East Lansing, MI, Major Professor, R.A. Merkel
- Doumit, M.E. 1989. Satellite cells of growing turkeys: influence of donor age, sex, serum and muscle on proliferation and differentiation *in vitro*. M.S. Thesis, South Dakota State University, Brookings, SD, Major Professor, D.C. McFarland

Research Reports

Doumit, M.E., L.C. Davis, J. Owens, and H. Mitchell. 2010. Regulation of marbling development in beef cattle by specific fatty acids. Final Report to National Cattlemen's Beef Association. 27 pp.

- Edwards, D.B, M.E. Doumit, C.W. Ernst and R.O. Bates. 2004. Influence of finisher facilities on pig growth performance. National Swine Improvement Federation Proceedings. Available at http://www.nsif.com/Conferences/2004/contents.html
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- Ernst, C.W., Banks, B.D., Barber, J.B., Bednar, G, Doumit, M.E., Hawkins, D.R., Nielsen, D., Osburn, W.N., Pursley, J.R., Raney, N., Ritchie, H.D., Saama, P.M., Tempelman, R.J. 2000. Update: MSU Lake City Experiment Station development and characterization of a beef cattle resource population for identifying loci controlling traits of economic importance. Michigan State University Beef Cattle, Sheep and Forage Systems Research Report. 569:150-155.
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Popular Press

Ritter, M.J., C.P. Allison and M.E. Doumit. 2002. Berkshire meat quality not affected by Paylean. National Hog Farmer. December 15, 2002, pages 28-29.

GRANTS and CONTRACTS AWARDED (Principle Investigator (PI) or Co-PI)

Summary of Funded Grants (Research and Teaching), \$ (number of grants)						
2008-2014 Career						
As Principle Investigator	\$517,964 (18)	\$897,445 (33)				
As Co-Investigator	\$133,465 (3)	\$2,130,484 (12)				
Total	\$651,429 (21)	\$3,027,929 (45)				

Improving yield, shelf-life and palatability of beef top round. M.E. Doumit (PI, 100% spending authority), R.P Richard, M.C. Colle, and M.J. Colle. Idaho Beef Council. \$29,643 funded 7-14.

Development of meat animal evaluators to serve Idaho. M.E. Doumit (PI, 100% spending authority), R.P. Richard. Idaho Beef Council. \$7,757 funded 7-14.

- Incorporation of potato extract into meat products. M.E. Doumit (PI, 100% spending authority), R.P Richard, M.C. Colle, and M.J. Colle. Basic American Foods. \$25,000 provided as gift 3-14.
- Improving retail color stability of beef after extended aging. M.E. Doumit (PI, 100% spending authority), R.P Richard and M.J. Colle. Idaho Beef Council. \$34,462 funded 7-13
- Will feeding supplemental polyunsaturated fatty acids (PUFAs) to pre-ruminating calves preferentially stimulate development of marbling. M.E. Doumit (PI, 100% spending authority), M. Drewnoski, G. Murdoch and W. Loucks. Idaho Beef Council. \$26,951 funded 7-13
- Development of livestock and carcass evaluators to serve Idaho. M.E. Doumit (PI, 100% spending authority), R.P. Richard. Idaho Beef Council. \$7,757 funded 7-13.
- Improving beef quality by nutritional modification during gestation. M.E. Doumit (PI, 100% spending authority), P. Rezamand, C.W. Hunt, R.P. Richard. Idaho Beef Council. \$35,762 funded 7-12.
- Consequences of extended aging on retail shelf-life and consumer acceptability. M.E. Doumit (PI, 100% spending authority), R.P. Richard. Idaho Beef Council. \$40,533 funded 7-12.
- Development of livestock and carcass evaluators to serve Idaho. M.E. Doumit (PI, 100% spending authority), R.P. Richard. Idaho Beef Council. \$9,052 funded 7-12.
- Co-culture of bovine muscle cells and fat cells in an environment that better models animal muscle: how do these cells influence each other? G.K. Murdoch, M.E. Doumit. Idaho Beef Council. \$53,699 funded 7-12.
- Improving Beef Quality by Nutritional Modification During Gestation. M.E. Doumit (PI, 100% spending authority), P. Rezamand, C. Hunt, and R.P. Richard. Idaho Beef Council. \$47,846 funded 7-11.
- Does Arachidonic Acid Preferentially Stimulate Differentiation of Bovine Intramuscular Preadipocytes via Prostaglandin Synthesis? M.E. Doumit (PI, 100% spending authority) and G. Murdoch. Idaho Beef Council. \$25,394 funded 7-11.
- Development of Livestock and Carcass Evaluators to Serve Idaho. M.E. Doumit (PI, 100% spending authority) and R.P. Richard. Idaho Beef Council. \$24,420 funded 7-11.
- Pre-harvest nutrition designed to improve livestock performance and product quality. G. Murdock (PI) and M. Doumit (Co-PI). Idaho Beef Council. \$48,160 funded 7-11.
- Effects of Vitamins A and D on bovine preadipocyte differentiation. M.E. Doumit, S.B. Smith (Texas A&M), B.J. Johnson (Texas Tech). Angus Research Foundation. Funded \$16,666 to each institution, available 10-1-2010. (PI, 100% spending authority of ID portion)
- Improving Tenderness of Beef Bottom Round. M.E. Doumit (PI, 100% spending authority) and R.P. Richard. Idaho Beef Council. \$39,557. Funded 7-10.
- Development of Livestock and Carcass Evaluators in Idaho. M.E. Doumit and R.P Richard. Idaho Beef Council. \$27,000. Funds available 9-10. (PI, 100% spending authority)
- Improving Tenderness of Beef Bottom Round Steaks. M.E. Doumit (PI, 100% spending authority), R.P. Richard and L.C. Davis. Idaho Beef Council. \$27,605. Funded 7-09.
- Regulation of marbling development in beef cattle by specific fatty acids. S.B. Smith (Texas A&M), B.J. Johnson (Texas Tech), and M.E. Doumit. National Cattlemen's Beef Association. Requested \$150,000. Idaho portion is \$50,000. Funded 5-09. (PI, 100% spending authority of ID portion)

- Effects of Fatty Acids on Differentiation of Bovine Preadipocytes from Intramuscular and Subcutaneous Fat Depots. M.E. Doumit (PI, 100% spending authority), R.A. Hill and G.K. Murdoch. Idaho Beef Council. \$42,559. Funded 10/08.
- Impact of halothane status on pig performance, meat quality and incidence of fatigue. (\$74,751 requested and funded 9/06. Co-PI) Michigan Animal Industry Coalition

Equipment Grant: High performance fluorescence, chemiluminescence, and visible imaging system (\$24,950. requested and funded 6/05. PI) MI Agricultural Experiment Station

Development and characterization of a beef cattle resource population for identifying loci controlling traits of economic importance. (\$8600. funded 5/05. Co-PI) Rood Trust fund/Lake City Experiment Station Advisory Committee

Investigation of Cellular Mechanisms Controlling Beef Quality (\$40,000. funded 5/04. Co-PI) Animal Industry Coalition

- Integration of transcriptional profiles with genetic marker data for identifying genes controlling economically important traits in pigs (\$1,000,000. funded 1/04. Co-PI) USDA-NRI Integrated.
- Analysis of swine quantitative trait loci affecting lean accretion through the growth phase and their impact on meat quality (\$61,850. requested 5/03 and \$58,488 funded. Co-PI) Animal Industry Coalition.
- Gene expression profiling during porcine skeletal muscle development and growth using a cDNA microarray (\$317,798. requested 1/03 and \$265,000. funded. Co-PI) USDA-NRI.
- Characterization of SR calcium release channel in halothane-sensitive pigs. (\$52,747. requested 10/02 and funded. PI) Elanco Animal Health.
- Use of halothane gas to identify pigs with novel SR calcium release channel defects (\$15,000. requested 10/02 and funded. PI) Animal Health Formula Funds, MSU-AES/USDA.
- Application of value cut technology to Holstein beef (\$50,000. requested 6/02 and funded; \$50,000. in-kind match from Smithfield Beef Enterprise. PI) Midwest Advanced Food Manufacturing Alliance.

Pork Muscle Profiling (Collaborative effort with Iowa State University and University of Wisconsin; \$47,500. Requested 5/02 and funded for MSU work. PI) National Pork Board.

Conference Proposal: Current issues in animal growth and lactation. Written on behalf of ASAS/ADSA Growth and Development Program Committee (\$10,000. requested 1/02 and \$8,000. funded. PI) USDA-NRI.

Relationship between glycolytic oscillations and pork color and water-holding capacity (\$29,850. requested 10/01 and funded. PI) National Pork Board.

- Biochemical characterization of pork quality. (\$30,000. requested 10/00 and funded. PI) National Pork Board.
- Livestock Exhibition Competitive Grant to provide lamb carcass demonstration at Northern Exposure Lamb Show. (\$2,300. requested 10/00 and \$1,700. funded. PI on behalf of MSU Block and Bridle Club) Michigan Dept. of Agriculture.
- A cooperative partnership for small- and medium-size beef producers in the Eastern corn belt: Phase II (\$2,500,000. funded. 8/00. \$472,736 to MSU, Co-PI, 10% Effort) USDA-IFAFS.
- Use of Paylean[™] to Enhance Lean Yield of High Quality Pork. (\$26,304. requested 7/00 and funded. PI) ELANCO Animal Health.

Development of an educational module based on the workshop: pH: The implications for pork quality. (\$4,840. requested 6/00 and funded. PI) National Pork Producers Council.

Optimizing tenderness of beef products. (\$53,000. funded 2/00, Co-PI) Animal Industry

Coalition (MSU).

- Biochemical characterization of superior quality pork. (\$30,000. requested 10/99 and funded. PI) National Pork Producers Council.
- Regulation of pork water holding capacity, color, and tenderness by protein phosphorylation. (\$29,860. requested 11/98 and funded. PI) National Pork Producers Council.
- Determining the relationship between pork quality and glycolytic potential, muscle fiber type, and cytosolic protein levels in six lines of DeKalb hogs. (\$9,600. requested 10/98 and funded, PI) DeKalb Swine Breeders, Inc.
- Discovery of novel genes that regulate livestock production efficiency. (\$30,000. funded 7/98. Co-PI) Research Excellence Fund (MSU).
- Effects of anabolic implants in growing-finishing steers on growth performance, muscle characteristics, and meat tenderness. (\$19,130. requested 5/98 and funded. PI) Animal Industry Coalition (MSU).
- Early weaning beef calves to improve beef production efficiency, and carcass quality and consistency. (\$26,050. requested 3/97 and funded. Co-investigator) Animal Industry Coalition (MSU).

HONORS AND AWARDS:

- Honorary State FFA Degree, June, 2014 for outstanding service and support to the Idaho FFA Association and agricultural education in Idaho.
- Outstanding Academic Advisor in the College of Agricultural and Life Sciences, April, 2014 University of Idaho Alumni Award for Excellence, Mentor for Will Loucks, December 2012
- ASUI Student Achievement Awards in Leadership and Service, Outstanding Faculty, April 2012
- Outstanding Academic Advisor in the College of Agriculture, Department of Animal and Veterinary Sci. 2012, 2014
- Nominated, University of Idaho Award for Teaching Excellence, 2012
- R.M Wade Excellence in Teaching Award, College of Agricultural and Life Sciences, University of Idaho, 2011
- Honored Guest at 2010 Block and Bridle Club Annual Recognition Banquet, Michigan State University. 2010. This distinction is typically recognition of distinguished careers of faculty or industry leaders, and was awarded to me *for contributions to the students of Michigan State University and agriculture through education and service*.
- Outstanding Faculty Award from Disability Support Services, University of Idaho, 2009 Distinguished Service Award, Block and Bridle Club, Michigan State University, 2008
- Teacher-Scholar Award, Michigan State University, 2002-2003. Awarded to faculty who have earned the respect of students and colleagues for their devotion to and skill in teaching. The essential purpose of the award is to provide recognition to the best teachers who have served at MSU for seven years or less.
- Outstanding Young Scientist Award-Teaching, American Society of Animal Science, Midwestern Section, 2000. Awarded for outstanding performance as a teacher of Animal or Dairy Science, including ability to motivate and stimulate students; mastery of subject, technique, vision and attitude; and evidence of interest in the improvement of teaching.
- Outstanding Graduate Student, Dept. of Animal Science, MSU, 1994

Outstanding Graduate Instructor, Dept. of Animal Science, MSU, 1993.

Snyder Alumni Award for Outstanding Service to MSU FarmHouse Fraternity, 1992

Member, Sigma Xi, Scientific Research Society, 1992

Member, Gamma Sigma Delta, Honor Society of Agriculture, SDSU, 1989 Outstanding Senior in Animal Science, WSU, 1987

SERVICE:

- University of Idaho
- Advisor, UI Livestock Judging Club (August 2011 to present)
- Advisor, UI Block and Bridle Club (May 2011 to present)
- Idaho State FFA livestock and meat evaluation Career Development Events. Assisted with setup of contests and provided discussion of official placings. 2008-2013. Co-superintendent (2009-present)
- New Student Orientation Panelist. UI faculty expectations and how students can meet these expectations. 1-7-2013, 1-13-2014
- MMBB 154 Instructor Search Committee, 12-2013 to 1-2014
- AVS Department Head Search Committee, 2012-2013
- College of Agricultural and Life Sciences Promotion and Tenure Committee, 2012, 2013.
- AVS Teaching/Curriculum Committee (2009 to present)
- AVS Undergraduate Awards Selection Committee (2009-present)
- Judge and provide critique at cured meats contest for Northwest Meat Processors Association. 4-2013 (Moscow, ID), 3-2012 (Corvallis, OR), 3-2011 (Portland, OR), 3-2010 (Gleneden Beach, OR), 3-2009 (Moscow, ID).
- Co-officiated Ag Day's Livestock Judging Contest, provided rationale for official placings, 10-2013, 10-2012, 10-2011, 9-2010, 10-2009, 10-2008.
- Ag Days Barbecue Assistant, 10-2013.
- Cook, CALS Welcome Back Picnic (9-2013, 8-2011)
- Participate regularly with recruiting visits/tours, Vandal Fridays, and advising for numerous prospective students.
- Chair, Promotion Committee for Dr. Rodney Hill, 2012
- Chair, Beef Nutrition Search Committee, 2011-2012, resulted in Dr. Mary Drewnoski hire.
- Mentoring Committee for Dr. Jeffrey Bohlscheid (Food Science) 2012
- Mentoring Committee, Kattlyn Wolf (Ag Ed) (2009-2013)
- CALS Corn Maze, Volunteered 3 Sundays, 2012; 1 Saturday, 2011
- Northern Idaho FFA Meats Contest, helped set-up and officiate, 2-3-12, 2-6-10
- Chair, Promotion and Tenure Committee for Dr. Gordon Murdoch, 2011
- Presented AVS teaching program overview to Advisory Board, 10-2011
- Third year review committee, Dr. Tracy Davis (2010)
- Nominator for Dr. Amin Ahmadzadeh, who received 2010 Western Section, American Society of Animal Science Distinguished Teacher Award.
- UI PREEC Sheep Unit Advisory Committee (2008-present)
- CALS commencement marshal, Spring, 2011.
- Judged and provided critique at cured meats contest for Montana Meat Processors Association, 4-24&25-10 (Lewistown, MT).
- Latah County Fair Beef Carcass Show, assisted with carcass data collection, discussed data with youth and parents, 10-2013, 10-2010, 10-2009, 9-2008.
- UI Block and Bridle Club, scholarship applicant reviewer 09, 10, election monitor, 4-10, assisted with fitting and showing clinic, 4-13, 4-12, 4-10
- Promotion Committee for Dr. Amin Ahmadzadeh (2009)

Discussed meat science capabilities with representatives of AgriBeef, UI Campus, 4-9-09 and 12-10-09.

Michigan State University

Department of Animal Science, Advisory Committee, 2006 - 2008 (Chair 2007-2008; Secretary 2006-2007)

Search Committee Chair, Value-Added Meat Processing Position in ANS/FSHN, 2007 MI State FFA Meat Judging Contest (Official, 2005-2008)

Judge, Michigan Meat Association Cured Meats Contest, 1997, 2006-2008

Department of Animal Science, Graduate Committee, 2003-2006 (Chair 2005-2006)

Search Committee for MI Ag Exp Station Associate Director, 2006

Social Committee, Dept. of Food Science and Human Nutrition, 2006-2007

Department of Animal Science, Ad Hoc Committee to evaluate Centers of Excellence, 2006 Academic Quadrathalon, Dept. of Animal Science, Coordinator, 2000

Meats contest official (written and practical), MSU, 1990-1994, 1999, 2000, 2003, 2006 Judge, Block and Bridle Ham Curing Contest, 2004-2006

Quiz Bowl Moderator, Green and White Hog Show, 2/7/04

Department of Animal Science, Consultative Committee (Dept. Chair Search), 8/2002-6/2004

College of Agriculture and Natural Resources, Curriculum Committee, 2000-2003 (Committee Chair 2002-2003)

Search Committee, CANR Associate Dean and Director, Academic and Student Affairs, 2002 Host Committee, 55th Annual Reciprocal Meat Conference, 2002

Department of Animal Science, Strategic Planning Committee, 2001

Undergraduate Curriculum Committee, Dept. of Animal Science, 1997-2000, Chair 1999-2000 Seminar Committee, Dept. of Food Science and Human Nutrition, 1997-2000

Block and Bridle Club Advisor, Dept. of Animal Science, 1998-2001

FarmHouse Fraternity Advisor, MSU, 1990-1993, and 1997-2000

Professional and Scholarly Organizations:

Memberships

American Society of Animal Science (ASAS) American Meat Science Association (AMSA)

Other Professional Service

Reviewer, Food Science Book Chapter, Muscle Proteins, Z. Ustunol, Ed.

Western Section, American Society of Animal Science

Served on selection committees for Young Scientist, Extension, and Distinguished Service Awards, 2010

USDA-CSREES Cool Season Food Legume (CSFL) Grant Panel, 2010

USDA-NRI Grant Panel Member (71.1B Improving Food Quality and Value) 2004, 2005

- Hosted S. Korean Scientist (Chung Soo Chung) and student. Demonstrated satellite cell isolation procedures (8/05)
- NC-1131 Regional Research Committee Molecular Mechanisms Regulating Skeletal Muscle Growth and Differentiation (1997-present) Secretary (2002), Chair and Host of Annual Meeting (2003). Prepare and present MI station report at annual meeting.
- National Food Centre (Ireland, 10/02) Discussed beef and pork quality research projects and

potential collaborative efforts with NFC and MSU scientists.

American Society of Animal Science/American Dairy Science Association:

Distinguished Teacher Award Committee (2007)

Growth and Development Program Committee (1999-2002), Vice chair (2001), Chair (2002), Co-chaired sessions on Growth, Development, Muscle Biology and Meat Science, ASAS (1996, 2000, 2001, 2002).

Outstanding Young Scientist Award Committee – Teaching (2001, 2002)

Meat Research Award Committee (1996, 1997)

Editorial Board for Journal of Animal Science (1999-2002; 2004-2007)

American Meat Science Association Research Protocol Committee (2001-2004, Chair, 2004)

Ad Hoc Reviewer for Journal of Animal Science, Meat Science, Journal of Cellular Physiology,

Tissue and Cell, Food Chemistry, Comparative Biochemistry and Physiology, Basic and Applied Myology, Professional Animal Scientist Journal, BARD and

USDA/CREES/NRI grant programs, Wyoming Ag Exp. Station (1996-present)

PROFESSIONAL DEVELOPMENT

Teaching:

CALS Teaching and Learning Workshop, Encouraging Student Engagement, 8-20-13 Academic Advising, Critical Changes for 2012-2013. 3-2012.

UI Advising Symposium, 10-2010.

Completed UI Animal Care and Use training, 1-2009. Required for teaching AVS laboratories that utilize animals.

UI Advising Symposium on Life-Long Learning: Role of Advisors Beyond the Classroom, 9-08. New Faculty Orientation, 8-19-08

Setting Expectations and Resolving Conflicts Between Faculty and Graduate Students (Presented by Graduate School to FSHN 8/18/2005, organized similar graduate student mentoring workshop for Dept of Animal Sci. 1/4/2006)

Lilly Faculty Development Workshops Attended

Beyond Student Ratings: Multiple Measures of Teaching Effectiveness, 2/9/2007 ePortfolios and the Triple Helix of Teaching, Learning, and Assessment, 3/17/2006 Pedagogical Changes that Foster Critical Thinking and Level the Playing Field for All Your Students, 3/24/2000

Designing Group Experiences that Work, 2/1/2000

Scholarship:

Completed NIH web-based training course "Protecting Human Research Participants", 9-17-09 Attended beef group retreat to gain better understanding of research interests and capabilities,

Salmon, ID, 8-14-09

Attended the National Cattlemen's Beef Association's Product Enhancement Committee meeting at the Cattle Industry Annual Convention to better determine this policy committee's research priorities and protocols for future grant RFPs. 1-2009.

Completed UI Animal Care and Use training, 1-7-09

College of Graduate Studies, New faculty Orientation, 11-10-08

UI Environmental Health and Safety Training, 9-3-08

Grant Workshop – Write Winning Grants, 12-17-07

Grants.gov training, MSU 1/9/07

Setting Expectations and Resolving Conflicts Between Faculty and Graduate Students (Presented by Graduate School to FSHN 8/18/2005, organized similar graduate student mentoring workshop for Dept of Animal Sci. 1/4/2006)

Outreach:

Completed NSC Defensive Driving Course, 11-30-09 Fort Dodge Injection Site Wet Lab, 11-19-2007