

DeMetris D. Reed, Jr., Ph.D.

CURRENT POSITION

Title: Assistant Professor of Animal/ Meat Science
Sul Ross State University; Alpine, TX

PERSONAL INFORMATION

Office Address 106 Range & Animal Science Bldg.
Sul Ross State University
Alpine, TX 79832

Home Address Alpine, TX 79830

Voice: 701.781.2844; **FAX:** 432.837.8406

E-mail: ddr19ga@sulross.edu

Website: <https://anscdemetrisreedjr.wordpress.com/>

EDUCATION

- 2015-2019 Ph.D. (Animal Science), North Dakota State University, Fargo.
Dissertation Advisor: Dr. Eric P. Berg. Dr. Xin Sun
Dissertation title “*PERCEPTIONS OF MODERN MEAT-ANIMAL PRODUCTION FROM CONSUMERS TWO TO THREE GENERATIONS REMOVED FROM THE FARM.*”
- 2013-2015 M.S. (Animal Science), West Texas A&M University., Canyon.
Thesis Advisor: Dr. Ty E. Lawrence.
Thesis title “*POST-MORTEM PORK FAT INJECTION WILL IMPROVE PALATABILITY ATTRIBUTES OF LOW QUALITY BEEF LOINS.*”
- 2007-2011 B.S. (Agriculture), Prairie View A&M University., Prairie View, TX.
Advisor: Dr. Victor G. Stanley.

EMPLOYMENT

<u>Date</u>	<u>Position</u>	<u>Location</u>
2019-Present	Assistant Professor Animal Science	Sul Ross State University
2015-2019	Graduate Research/Teacher Assist.	North Dakota State University
2013-2015	Graduate Research/Teacher Assist.	West Texas A&M University
2013-2015	Beef Carcass Research Center	Canyon, TX
2012-2013	Graduate Research Assist.	Prairie View A&M University
2007-2011	Assistant Researcher Student Position	Prairie View A&M University

HONORS AND AWARDS

- 2018 North American Colleges and Teachers of Agriculture, **Graduate Teaching Award** (\$1,000)
- 2017 **Research Scholarship**, Zoetis, Inc. Animal Health, North Dakota State University (\$3,000)
- 2015 **Graduate Research/Teaching Assistantship**, North Dakota State University, Department of Animal Sciences (\$54,000).
- 2015 **WTAMU Henry A. Callis Award**. Awarded by the Brothers of Alpha Phi Alpha Fraternity, Inc. and WT Greek Board to honor members who have impacted the Greek Life and community at WTAMU and Canyon, Texas.
- 2015 **A.J. Swope Spirit Award**. Awarded to WTAMU Student who exhibits school pride and spirit that is seen on campus and in the community.

- 2013 West Texas A&M University **Kilgore graduate research grant** – WTAMU Kilgore Graduate School (\$3,000).
- 2013-2015, **Graduate Research Assistantship**, West Texas A&M University College of Agriculture and Natural Sciences.
- 2009, **Hoover Carden Texas Extension Academic Scholarship**. Maintained a 3.0 GPA for 3 years at Prairie View A&M University. (\$1000).

MEMBERSHIPS

Sul Ross State University, College of Agricultural and Natural Resource Sciences:

- San Antonio Livestock Show & Rodeo, BBQ Cook-off Committee, Fall 2019-Present
- North American Colleges and Teachers of Agriculture, Spring 2018-Present
- American Society of Animal Science, Spring 2013-Present
- American Meat Science Association, Spring 2012-Present
- American Association for the Advancement of Science, Fall 2016-Present

North Dakota State University, Department of Animal Sciences:

- North Dakota State University Animal Sciences Graduate Student Organization, Fall 2015-2019
 - Secretary, Spring 2016-Spring 2017
 - Clothing Committee Chair, Spring 2016-Spring 2017
 - President, Spring 2017-2018
 - Carnivore Catering Chairman, 2018-2019

West Texas A&M University, Department of Agriculture:

- Rho Mu Chapter of Alpha Phi Alpha Fraternity, Inc., Graduate Advisor, Fall 2014- Present
- American Society of Animal Science, Spring 2013-2015

Prairie View A&M University, College of Agriculture & Human Sciences

- Livestock Show Team, Fall 2008-Fall 2011
- Minorities in Agriculture, Natural Resources and Related Sciences, (MANRRS), Fall 2007-Fall 2012
- Prairie View A&M University Pre-Vet Club, Fall 2009-Spring 2010
 - Secretary, Fall 2009-Spring 2010
 - Vice-president, Fall 2009-Spring 2010

SPECIAL ASSIGNMENTS AND LECTURES

- **Consultant**: Consultant for the SRSU Meat Processing facility, Reconstruction Start Summer 2020 (Summer 2019)
- **Host**: Cooked meal for veterans rut 26 mile walk, served 40 Vets for Sul Ross Veterans Student Org. (Fall 2019)
- **Branding**: Created new meat retail logo for Sul Ross State Red Meats Retail Store. (Fall 2019)
- **Peer reviewer**: Reviewed 3 meat/muscle biology research papers advised by Dr. Xin Sun of North Dakota State University. (Fall 2016, Spring 2017)
- **Processing**: Processed over 10,000 lbs. of pork and beef product for research at University of Illinois at Urbana-Champaign. (Summer 2017)
- **Consultant**: for the New Meat Lab and Doc's Prime Meats Store at West Texas A&M University (Summer 2017)

- BBQ Bootcamp Tailgate: Help coordinate and facilitate agriculture industry outreach at football games and provide BBQ samples for free. North Dakota State University(Fall 2016, Fall 2017)
- Lab lecturer: Taught NDSU Introduction to Meat Science lab, proctored and designed quizzes, created lectures for each lab of the 2 lab sections (25 students each). (Spring 2017)
- Lecture: Teaching Assistant for Meat Animal Carcass Evaluation, taught lessons, proctor test, and created lectures/test. (Fall 2016, Fall 2017)
- Research: Assisted in collection of the National Beef Quality Audit for the 2016 Beef Quality Assurance while at North Dakota State. (Fall 2016)
- Recommendation: Wrote two letters of recommendation for former professors at West Texas A&M University for promotion and tenure position. (July 2016)
- Speaker: invited speaker at the Purdue Graduate Student Association to discuss the importance of meat in the diet. (Spring 2016)
- Lecture: lectured animal physiology class. (Fall 2015)
- Data Collection: Collected carcass data at the Beef Carcass Research Center for producer, feedlot, and animal health corporation's in various Beef packing plants in the U.S. Over 50,000 head of cattle were evaluated. (Spring 2013-Summer 2015)
- Teacher Assistant. Taught lab class of Meat Science. West Texas A&M University, Canyon, TX. (Fall 2014, Spring 2015)
- Supervisor. Assisted the supervision of the WTAMU Meat Laboratory and Meats retail sales, Coordinator of Research/Operations. (Spring 2013-Summer 2015)
- Advisor. Served as advisory of the Undergraduate Chapters of Alpha Phi Alpha Fraternity, Inc. Rho Mu Chapter at West Texas A&M University and Eta Upsilon Chapter at Texas Tech University. (Fall 2014- Spring 2015)
- Moderator. Animal Science Sessions (8) at the annual MANRRS Conference in Overland Park, Kansas City, Kansas , and was elected the Region IV Vice-President over the States of Texas, Oklahoma, Louisiana, Missouri, and Kansas. (Spring 2010-Spring 2011).
- Host. Hosted the newly appointed Texas A&M System Chancellor and Board of Regents for three days tour of the College of Agriculture & Human Sciences facilities, labs, and classroom visit and a final greeting to the entire University. (Fall 2010)

PUBLICATIONS

Scientific Publications:

In Progress:

Reed, D.D., Germolus, A., Baranko, L., Sun, X., Berg, P., Newman, D., Berg, E. BRIDGING THE GAP BETWEEN CONSUMERS AND AGRICULTURE PRODUCERS USING THE NDSU BBQ BOOTCAMP MODEL.

Reed, D.D., Baranko, L., Berg, E. THE IMPACT OF BACKGROUND ON STUDENT SUCCESS IN INTRODUCTORY ANIMAL SCIENCE COURSE AT NDSU.

Published:

Reed, D.D., L.J. Walters, A.N. Schmitz, D.E. Guadian-Garcia, T.E. Lawrence.2015. POST-MORTEM MECHANICALLY INJECTION OF PORK BACK FAT TO IMPROVE PALATABILITY ATTRIBUTES OF LOW-QUALITY BEEF STEAKS. *Meat Science*

Reed, D.D., E.P Berg, P.T. Berg, M.J. Marchello, W.D. Slanger. 2019 PRODUCT YIELD AND FATTY ACID CONTENT OF NORTH DAKOTA MULE DEER, ELK, AND MOOSE. *Meat and Muscle Biology*

Sunil GC., Borhan Saidul Md, Yu Zhang, **DeMetris Reed**, Mostofa Ahsan, Eric Berg, and Xin Sun. 2021, USING DEEP LEARNING NEURAL NETWORK IN ARTIFICIAL INTELLIGENCE TECHNOLOGY TO CLASSIFY BEEF CUTS. *Frontiers in Sensors*

Books/Book Chapters:

Thesis- Post-mortem mechanical injection of low-quality Beef loins with Pork back fat improves palatability attributes.

Dissertation- Perceptions of modern meat-animal production from consumers two to three generations removed from the farm.

Proceedings:

Reed, D.D., L.J. Walters, A.N. Schmitz, D.E. Guadian-Garcia, T.E. Lawrence. 2015. Post-mortem mechanically injection of pork back fat to improve palatability of low quality beef loins. Submitted to 68th Reciprocal Meat Conference.

Reed, D.D., E.P. Berg, M.J. Marchello, W.D. Slanger, and P.T. Berg. Cutability and nutrient content of North Dakota big game species. Submitted to 69th Reciprocal Meat Conference.

Reed, D.D., E.P Berg, P.T. Berg, M.J. Marchello, W.D. Slanger. Lean Muscle Collection of North Dakota Game Deer Species. Submitted to 2018 ASAS Annual Meeting, Vancouver, Canada

Reed, D.D., Germolus, A., Baranko, L., Sun, X., Berg, P., Newman, D., Berg, E. Bridging The Gap Between Consumers and Agriculture Producers Using the NDSU BBQ Boot Camp Model. Submitted to the 71st Reciprocal Meat Conference.

Videography:

https://www.youtube.com/watch?v=8Y0q4aKvUro&feature=youtu.be&fbclid=IwAR0Bu-tG_04vIEBS9TrD5qO6VtRAV4wYrfUggGR-I9yaojKSvYJQbNkOg-Y – Importance of Pork Quality

RESEARCH PROPOSALS

Funding (Completed):

Post-mortem injection of pork fat into low quality beef loins will improve palatability and consumer preference. November 2014. \$3,000.00

Visual aid equipment for the focus of meat production and safety training for beef, pork, and lamb at the NDSU Meat lab Farm to Table Initiative. September 2017. \$5500.00

Promoting the Importance of Pork Quality through High Resolution Video Contents. September 2017. \$2500.00

Evaluation of imaging processing technology to predict outstanding beef flavor and oleic acid content. October 2017. \$36,270.00

Predict early stages of respiratory disease in cattle using near-infrared spectroscopy (NIRS) technology. February 2018: \$17,400.00

Assessment of consumer purchasing and education of beef quality attributes and cuts using mobile applications (Android and iPhone Operation System: IOS). February 2018: \$15,000

Evaluation of youth's perception of red meat through culinary grilling safety and food literacy skills and its contribution to career development. March 2018: \$22,896.29

NDSU BBQ Bootcamp Beef Commission sponsorship. 2017, 2018: \$20,000

Using near-infrared spectroscopy (NIRS) technology to correlate respiratory disease in cattle and outcomes of meat quality. January 2018: \$14,600.00

NDSU BBQ Bootcamp Frisco, Texas NCAA Division I Championship Tailgate. 2019: \$1,400 Extension, \$2,000 ND Beef Commission, \$500 ND Livestock Alliance Association, \$300 ND Lamb & Wool Association, \$2,000 Animal Science Dept. Total: \$6,200.00

Fund Request (Incomplete):

*Increasing field pea concentrate (*Pisum sativum*) level in high-concentrate diets on growth performance, carcass traits, and palatability attributes in finishing Brahman steers.* Requested funds: \$140,000.00

COURSE HISTORY (Lecturer/TA)

Sul Ross State University, Alpine, TX.

- Instructor:
- Current Issues in Agriculture; ANSC 2312
 - Create lectures and coursework (29 students, Spring 2020)
 - This course is designed to educate students about major issues in the food, agricultural, and natural resource sciences and to expose students to a variety of methods used to critically evaluate contentious issues and effectively communicate, inform, and influence decisions made about these issues. Additionally, this course explores the social impacts and opinions that warrants issues in the agricultural industry and society.
- Instructor:
- Meat Technology; ANSC 4300
 - Create lectures and coursework (3 students, Spring 2020)
 - This course is designed to educate students about the global product that is meat and to expose students to a variety of methods and technologies used to critically evaluate producers, manufacturers, transporters, and retailers issues and effectively communicate, inform, and influence decisions made about these

issues. Additionally, this course explores the impacts consumer issues have on the meat animal industry and food supply chain.

- Instructor:
- Livestock Slaughter Federal and State Inspection; ANSC 3411
 - Create lectures and coursework (3 students, Spring 2020)
 - The content of this course deals with federal and state regulations pertaining to livestock slaughter for human consumption. Laboratory training will be given to promote proficiency in meat inspection procedure and HACCP certification.

- Instructor:
- Meat Judging
 - Create lectures and coursework (4 students, Spring 2020)
 - Practice Meat Judging (Cattle, Pork, Lamb)
 - Recruitment for students to enter into the meat science industry.
 - Hired a student Judging Coach to assist in training and competitions.

- Instructor:
- Meat Production; ANSC 5328
 - Create lectures and coursework (graduate students, Summer I, 2020)
 - Conversion of muscle to meat with emphasis on physical and biochemical changes. Microbiology and other related characteristics of meat and its implication in commercial meat processing.

- Instructor:
- Principles of Meat Science; ANSC 3406
 - Created lectures (28 students; Fall 2019)
 - Prepared the lab for hands-on classwork
 - Designed and graded quizzes
 - Designed and grade lecture class exams (4 per semester)
 - Communicated with students on absences and makeup work

- Instructor:
- Meat Animal Carcass Evaluation; ANSC 2305
 - Hands-on live animal evaluation and fabrication of carcass demonstrations lab sections (10 students; Fall 2019)
 - Prepared and evaluated lessons
 - Created lectures/exams

- Instructor:
- Sausage Manufacturing; ANSC 3307

- Created lectures (12 students; Fall 2019)
- Prepared the lab for hands-on classwork
- Designed and graded quizzes
- Sausage Product Show and Judging

Potential Courses for Students and Community

- **Instructor:**
- Que'linary Arts© Art of Texas Barbecue, ANSC 4309 & Summer Short Course
 - This course is designed to educate students using surveys, demonstrations, and participating in a class celebrating the rich heritage of American Barbecue. We will explore Texas Barbecue; preparation techniques which includes types of meats, seasonings, and cooking methods with emphasis of meat in the diet and food safety, cost, and availability. Emphasis will focus on regional cuisine (e.g., Alabama, Carolinas, Georgian, Kansas City, Memphis, and Cajun) and international (e.g., Brazil, Cuban, Asian, and Australian) methods to compare to the US.
- Meat Fabrication ANSC 4303
 - Courses include advanced meat cutting knowledge and techniques. Provide step-by-step instruction on how to break whole animals into primals, subprimals and retail cuts. Additionally, cover worker safety, consumer labeling and food safety as well as the importance of Standard Operating Procedures (SOPs).

North Dakota State University, Fargo, ND.

- **Lab lecturer:**
- Principles of Meat Science Lab; ANSC 340
 - Prepared the lab for hands-on classwork
 - Designed and graded quizzes
 - Grade lecture class exams (4 per semester)
 - Communicated with students on absences and makeup work
 - Created lectures for each of the 2 lab sections (50-52 students; Spring 2017, Spring 2018, Spring 2019)
- **Lab lecturer:** Meat Animal Carcass Evaluation; ANSC 240
 - Prepared lessons
 - Proctor test
 - Created lectures/exams
 - Hands-on live animal evaluation to carcass demonstrations for each of the 2 lab sections (46-50 students; Fall 2016, Fall 2017, Fall 2018)
- **Lecture:** Animal Physiology; ANSC

- Lectured or proctored quizzes in class upon the absence of the main instructor (Fall 2015)
- Instructor: NDSU BBQ Boot Camp – History of BBQ and Meat Selection
 - Taught 17 outreach programs on the history of barbeque and meat selections for cooking. 2017-2019

West Texas A&M University, Canyon, TX.

- Teacher Assistant: General Meat Science; ANSC 3317
 - Set-up meat lab for fabrication and further processed meats projects
 - Coordinated with USDA inspectors for Slaughter days and advised them students would be in attendance.
 - (Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015)