

Caleb C Reichhardt
College of Tropical Agriculture and Human Resources
Department of Human Nutrition, Food, and Animal Sciences
FTE Distribution: 60% I; 40% R

Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
Bachelors	Montana State University	Animal Science; Science
PhD	Utah State University	Animal Nutrition and Growth

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Assistant Professor	University of Hawai'i at Mānoa	8/2022-Current
Graduate Research Assistant	Utah State University	7/2018-7/2022
Student Teaching Assistant	Montana State University	8/2017-5/2018

Courses Taught

Graduate Seminar: ANSC 431/FSHN 681 (1 credit)
Principles of Animal Nutrition: ADVS 3500 (Utah State University) (3 credits)

Publications (reverse chronological order)

Refereed Journal Publications

1. R. Feuz, **C.C. Reichhardt**, R. Larsen, K.J. Thornton, and M.D. Garcia. 2022. "Comparing Net Returns in the Feedlot: *Bos taurus* vs *Bos indicus* influenced steers with varying anabolic implant intensity." *Translational Animal Science*. <https://doi.org/10.1093/tas/txac111>.
2. **C.C. Reichhardt***, C.S. Stafford*, J.M. Cuthbert, D. Dang, L.A. Motsinger, M.J. Taylor, R.K. Briggs, T.J. Brady, A.J. Thomas, M.D. Garcia, S. Matarneh, and K.J. Thornton. 2022. "Cattle breed type and anabolic implants impact calpastatin expression and abundance of mRNA associated with protein turnover in the longissimus thoracis of feedlot steers." *Journal of Animal Science*. <https://doi.org/10.1093/jas/skac204>
***C.C. Reichhardt** and C.S. Stafford contributed equally to this publication.
3. **C.C. Reichhardt***, E.M. Messersmith*, T.J. Brady, L.A. Motsinger, R.K. Briggs, B.R. Bowman, S.L. Hansen, and K.J. Thornton. 2021. "Anabolic implants varying in hormone type and concentration influence performance, feeding behavior, carcass characteristics, plasma trace mineral concentrations, and liver trace mineral concentrations of Angus sired steers." *Animals*. <https://doi.org/10.3390/ani11071964>
***C.C. Reichhardt** and E.M. Messersmith contributed equally to this publication.
4. **C.C. Reichhardt**, R. Feuz, T.J. Brady, L.A. Motsinger, R.K. Briggs, B.R. Bowman, M.D. Garcia, R. Larsen, and K.J. Thornton. 2021. "Interactions between cattle breed type and anabolic implant strategy impact circulating serum metabolites, feedlot performance, feeding behavior, carcass characteristics, and economic return in beef steers." *Domestic Animal Endocrinology*. doi.org/10.1016/j.domaniend.2021.106633
5. **C.C. Reichhardt**, L. L. Okamoto, L.A. Motsinger, B.P. Griffin, G.K. Murdoch, and K.J. Thornton. 2021. "The impact of polyamine precursors, polyamines and steroid hormones on temporal mRNA abundance in bovine satellite cells induced to differentiate." *Animals*. doi.org/10.3390/ani11030764
6. R.K. Briggs, **C.C. Reichhardt***, and A. Sears. 2020. "Does early weaning have both short- and long-term effects on pancreatic islets and skeletal muscle?" *Journal of Physiology*. doi.org/10.1113/JP280109
*Corresponding author
7. **C.C. Reichhardt**, A. Ahmadpour, R.G. Christensen, N.E. Ineck, G.K. Murdoch, and K.J. Thornton. 2020. "Understanding the influence of trenbolone acetate and polyamines on proliferation of bovine satellite cells." *Domestic Animal Endocrinology*. doi.org/10.1016/j.domaniend.2020.106479

Extension Publications

1. **C.C. Reichhardt**, R.K. Briggs, L.A. Motsinger, K.J. Thornton, and M.D. Garcia. 2022. "The Benefits of Growth-Promoting Implants for Beef Cattle." Fact Sheet. Utah State University Extension.

Leadership Roles (Committees, Boards, Advisory, etc.)

2021-2024 WIMU Regional Program in Veterinary Medicine Discussant for Sarah A. Bayles

Graduate Students

<u>Category</u>	<u>Current Number of Students</u>	<u>Number Graduated (Career)</u>
Chair of Master's Committees	0	0
Chair of PhD Committees	0	0
Member of Master's Committees	0	0
Member of PhD Committees	0	0

Grant Support

Title of Grant: Comparison of growth promoting technologies and performance of *Bos indicus* vs. *Bos taurus* influenced steers.

Source of Grant: USU ADVS Graduate Research Grant

Total Dollar Value (Your share of the grant value): \$4,000

Dates of Grant: 10/2019-10/2022

Role (PI, CoPI): PI

Presentations at Conferences

Title: Examining the relationship between breed type and anabolic implant protocols in performance in the feedlot, health, and temperament of beef steers (Poster).

Authors (asterisk on the presenter): C.C. Reichhardt*, A.F. Alberto, R.K. Briggs, L.A. Motsinger, L.L. Okamoto, B.W. Roholt, B.R. Bowman, M.D. Garcia, K.J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Louisville, KY, USA

Date of Presentation: July 2021

Title: Understanding the role of zinc and manganese in proliferation and protein synthesis of primary bovine satellite cells (Poster).

Authors (asterisk on the presenter): A.F. Alberto, L.A. Motsinger, C.C. Reichhardt, S.L. Hansen, K.J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Louisville, KY, USA

Date of Presentation: July 2021

Title: The effects of fish oil supplementation on markers of inflammation and skeletal muscle and adipose growth in pigs. (Poster).

Authors (asterisk on the presenter): L.L. Okamoto*, C.C. Reichhardt, S.L. Lopez, A.F. Alberto, R.K. Briggs, L.A. Motsinger, F. Batistel, K.J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Louisville, KY, USA

Date of Presentation: July 2021

Title: Examining feedlot performance of Angus sired steers implanted with estradiol, trenbolone acetate, or a combined implant (Poster).

Authors (asterisk on the presenter): C.C. Reichhardt*, T.J. Brady, R.K. Briggs, L.A. Smith, B.R. Bowman, A.J. Thomas, and K.J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Online

Date of Presentation: July 2020

Title: Comparing the effectiveness of anabolic implants in Santa Gertrudis sired steers versus Angus steers (Talk).

Authors (asterisk on the presenter): C.C. Reichhardt*, T.J. Brady, R.K. Briggs, L.A. Smith, B.R. Bowman, M.D. Garcia, and K.J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Online

Date of Presentation: July 2020

Title: Hormone content of anabolic implants differentially affects plasma and liver trace mineral concentrations (Talk).

Authors (asterisk on the presenter): E.M. Messersmith*, C.C. Reichhardt, K.J. Thornton, and S.L. Hansen

Name of Conference: American Society of Animal Science Annual Conference

Location: Online

Date of Presentation: July 2020

Title: The effects of different mineral supplementation strategies on feedlot performance of mineral deficient cattle (Poster).

Authors (asterisk on the presenter): T.J. Brady*, C.C. Reichhardt, R.K. Briggs, L.A. Smith, K. Rood, B. Tarbet, M.D. Garcia, and K.J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Online

Date of Presentation: July 2020

Title: Examining the effects of estradiol, trenbolone acetate, or polyamines on bovine satellite cell differentiation (Poster).

Authors (asterisk on the presenter): L.L. Okamoto*, C.C. Reichhardt, B.P. Griffin, L.A. Smith, G.K. Murdoch, and K.J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Online

Date of Presentation: July 2020

Title: Effects of feeding a novel alfalfa leaf pellet (ProLEAF MAX™) and alfalfa stem byproduct (ProFIBER Plus™) on growth and conception rates of developing dairy heifers (Poster).

Authors (asterisk on the presenter): L.A. Smith*, A.Y. Young, R.K. Briggs, T.J. Brady, C.C. Reichhardt, and K.J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Online

Date of Presentation: July 2020

Title: Oxytocin-induced secretion of 13,14-dihydro-15-keto-prostaglandin F_{2α} in mares with prolonged corpus luteum function (Talk).

Authors (asterisk on the presenter): B. Sarnecky*, D.K. Vanderwall, H. Mason, C. C. Reichhardt, and B. Ambrose.

Name of Conference: Clinical Theriogenology Conference

Location: Online

Date of Presentation: July 2020

Title: Determining the molecular mechanism through which estradiol and trenbolone acetate improve skeletal muscle growth in beef cattle (Poster).

Authors (asterisk on the presenter): C.C. Reichhardt*, A. Ahmadpour, C.A. Bidwell, A.J. Thomas, and K. J. Thornton

Name of Conference: American Society of Animal Science Annual Conference

Location: Austin, TX, USA

Date of Presentation: July 2019

Title: Development of goats with Callipyge mutation (Poster).

Authors (asterisk on the presenter): T.S. Hadfield*, C.C. Reichhardt, I. Sroufe, N.E. Ineck, M. Rigouski, C.A. Bidwell, D. Webster, D. Carlson, K.J. Thornton, I. Polejeva, and N.E. Cockett

Name of Conference: International Society for Animal Genetics Conference

Location: Lleida, Spain

Date of Presentation: July 2019