Kyle C. Caires, Ph. D.

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Higher Education

<u>Degree</u>	Field of Study	Institution and Location	Completed
B.S.	Animal Science (Chemistry minor).	Oregon State University, Corvallis, OR.	6/2005
M.S	Animal Science – Reproductive Physiology	Washington State University, Pullman, WA	A. 5/2007
Ph. D.	Animal Science – Stem Cell Biology	Washington State University, Pullman, WA	A. 2/2011

Major subjects

B.S. – Beef Cattle, Poultry Science and Pre-Veterinary Medicine degree options in Animal Sciences Graduate – Biology and Genomics of Reproduction in the Department of Animal Sciences

Thesis/Dissertation subjects

M.S. - Role of vascular endothelial growth factor in bovine testis development Ph.D. - Factors regulating spermatogonial stem cell homeostasis in mammals

Professional Experience

- 2016-pres. Assistant Extension Agent, Department of Human Nutrition, Food and Animal Sciences, University of Hawaii at Manoa, Honolulu, HI. Tenure-track appointment includes 100% Extension FTE.
- 2015-2016. Associate Professor, Department of Animal Sciences, Berry College, Mount Berry, GA. Tenure-track appointment included teaching, research, and advising undergraduate students.
- 2011-2015. Assistant Professor, Department of Animal Sciences, Berry College, Mount Berry, GA. Tenure-track appointment included teaching, research, and advising undergraduate students.
- Visiting Assistant Professor, Joint Program between Department of Integrative Physiology and Neuroscience, and Department of Animal Sciences, School of Veterinary Medicine, Washington State University, Pullman, WA. Three-month, 100% research appointment. Conducted research and mentored graduate students.
- Visiting Assistant Professor, Department of Animal Sciences, Berry College, Mount Berry, GA. Nine-month, 100% teaching appointment.
- 2007-10 Graduate Teaching Assistant, Department of Animal Sciences, Washington State University, Pullman, WA.
- 2005-07. Graduate Research Assistant, Department of Animal Sciences, Washington State University, Pullman, WA.

Teaching Experience (complete teaching evaluations are available upon request)

HON 450/451. Honors Research Projects

a. Instructor		
Institution	Description	Semesters (years)
Berry	ANS 105. Introduction to Agricultural Sciences1	Fall/Spring (2010-14)
Berry	ANS 302. Veterinary Microbiology*23	Fall (2011-15)
Berry	ANS 324. Genetics of Livestock Improvement*	Fall (2010-11)
Berry	ANS 327. Reproductive Physiology*‡	Spring/Fall (2011-15)
Berry	ANS 441. Advanced Reproductive Technologies*	Spring (2014)
Berry	ANS 498. Directed Study	Fall (2014-15)

b. Teaching Assistant, Lead (more than 50%)

Institution	Description	Semesters (years)
Wash. St.	AS 101. Introduction to Animal Science*	Fall (2006-07, 2009)
Wash. St.	AS 174. Beef Cow Calf Laboratory	Fall (2008)
Wash. St.	AS 330. Animal Genetics*	Spring (2008)
Wash. St.	AS 351. Physiology of Reproduction Lab	Spring (2006-07, 2009)
Wash. St.	AS 260. Live Animal and Carcass Evaluation	Fall (2005)
Oregon St.	ANS 327. Advanced Applied Repro (paid hourly)	Fall (2002-04)

Spr/Sum/Fall (2012-15)

c. Teaching Assistant, Supporting (less than 50%)

Institution	Description (role)	Semesters (yrs)
Oregon St.	ANS 121. Intro to Animal Sciences (15%)	Fall (2003-04)
Oregon St.	ANS 317. Repro in Dom. Animals Lab (30%)	Spring (2005)

d. Guest Lectures:

Berry

Institution	Description (semester/year)
Berry	ANS 200. Livestock Feeding and Ration Formulation. Tropical Forage Production (S11),
	Cattle Feeding in the Tropics (S11/S12), Heifer Development (S11)
Berry	ANS 422. Beef Systems Management. Stockyard Management and Field Trip, Calhoun Sale
	Barn, GA (S10)
Wash. St.	AS 101. Introduction to Animal Science, Broiler Production and Management (F05)
Wash. St.	AS 174. Beef Cow Calf Laboratory, Market Steer Selection (Fall 2006), Beef Carcass
	Evaluation (Fall 2007), Beef Heifer Fitting and Showing (Fall 2009)
Wash. St.	AS 180. Sophmore Seminar. Career Opportunities for Animal Sciences Graduates (S09)
Wash. St.	AS 260. Live Animal and Carcass Evaluation. Beef Carcass Grading (F06/F07), Market Hog
	Selection (F06), Boar/Gilt Selection (F06/F07)
Wash. St.	AS 350. Physiology of Reproduction. Puerperium, Lactation and Parturition Lectures (S09)
Wash. St.	AS 351. Physiology of Reproduction Laboratory. Cattle Pregnancy Diagnosis via
	Ultrasonography (S08)
Oregon St.	ANS 207. Sophomore Seminar. Graduate School Opportunities in Animal Sciences (05).

¹ Course offering also included a separate laboratory class taught by me

² Course was independently developed by me

³ I routinely offer honorized versions of these courses to support students in the Honors Program.

Oregon St. ANS 231. Livestock Evaluation. Beef Steer Selection (S04-S05), Oral Reasons (S05).

Oregon St. ANS 435. Applied Animal Behavior Laboratory. Low-Stress Handling and Restraint of Sheep (S05), Proper Restraint Methods for Cattle and Horses (S05).

f. Course Development

Institution	Description (semester/year)
Berry	ANS 441 - Developed an upper-level course in advanced reproductive technologies. (S14)
Berry	ANS 105 - Added student-driven, agricultural research projects from literature to laboratory sections. (F12)
Berry	ANS 302/302L - Developed a basic and applied veterinary microbiology course. (F11)
Berry	ANS 327/327L - Added lecture sections in bioinformatics and poultry (S11). Designed
	laboratories in ultrasonography, oocyte collection, in-vitro fertilization, early embryonic
	development and embryo flushing/transfer (S11); gynecological exams (S/F12)
Berry	ANS 324/324L - Added lecture sections in canine, equine, poultry and molecular genetics
	(F10). Designed and implemented laboratory activities in DNA fingerprinting, functional
	genomics, and cattle selection (F11).
Wash. St.	AS 350 - Developed puerperium, lactation and parturition lecture series. (S09)
Wash. St.	AS 174 - Developed lectures and laboratory materials for beef cow efficiency, stocker/feedlot management and carcass evaluation sections of the course. (F08)

Publications

Book Chapters

1. Caires KC, Oatley JM, McLean DJ. Cellular, Molecular, and Genomic Mechanisms Regulating Testis Function in Livestock. In: Reproductive Genomics in Domestic Animals. Jiang Z, Ott TL, (eds.). Wiley-Blackwell; June 2010. p. 269-291. ISBN: 978-0-8138-1784-2

Invited Book Reviews

1. **Caires KC**. Unraveling the Genetics of Bovine Johne's Disease. ISBN: 978-1-61668-204-0. In Veterinary Pathology, 49(5) 884-886.

Refereed Journals (underline indicates student authors)

- 1. Adhikari B, Lee CN, Khadka VS, Deng Y, Fukumoto G, Thorne M, Caires K, Odani J, Mishra B. RNA-Sequencing based analysis of bovine endometrium during the maternal recognition of pregnancy. BMC Genomics. 2022 Jul 7;23(1):494. doi: 10.1186/s12864-022-08720-4.
- 2. Facioli FL, De Marchi F, Marques MG, Michelon PRP, Zanella EL, Caires KC, Reeves JJ, Zanella R. 2020. The Outcome and Economic Viability of Embryo Production Using IVF and SOV Techniques in the Wagyu Breed of Cattle. Vet Sci. 2020 May 1;7(2):58.
- 3. Okpeku, M., Peters, S., Imumorin, I., Caires, K., Sharma, V., Wheto, M., Thangaraj, K. (2017). Mitochondrial DNA hypervariable region 1 diversity in Nigerian goats. Animal Genetic Resources.
- 4. Caires, KC. 2015. Reproductive success in ruminants: A complex interaction among endocrine, metabolic, and environmental factors. Journal of Animal Science. 93. doi: 10.2527/jas2015-9045.
- 5. Kitts-Morgan, S.E., **K.C. Caires**, <u>L.A. Bohannon</u>, <u>E.I. Parsons</u>, and <u>K.A. Hilburn</u>. 2015. Freeranging farm cats: home range size and predation on a livestock unit in Northwest Georgia. PLOS'sEPONE.
- 6. McSpadden K, Caires K, Zanella R. 2013. The effect of Mycobaterium avium subspecies paratuberculosis Exposure on Animal Health. Acta Scientiae Veterinaria, 41(1095)

- 7. Caires KC, de Avila JM, McLean DJ. 2012. Endocrine regulation of the spermatogonial stem cell niche in the seminiferous tubule of the mouse. BioResearch Open Access, 1(5):220-230
- 8. **Caires KC**, de Avila JM, Cupp AS, McLean DJ. 2012. VEGFA family isoforms regulate spermatogonial stem cell homeostasis *in vivo*. Endocrinology, 153(2):887-900. PMID: 22147017.
- 9. Caires KC, Shima CS, de Avila JM, McLean DJ. 2012. Acute ethanol exposure affects spermatogonial stem cell homeostasis in prepubertal mice. Reproductive Toxicology, 33(1):76-84. PMID: 22198099.
- 10. Caires K, Broady J, McLean D. 2010. Maintaining the male germline: regulation of spermatogonial stem cells. J Endocrinol. 205(2):133-145. PMID: 20147357.
- 11. Caires KC, Schmidt JA, Oliver AP, de Avila JM, McLean DJ. 2009. Endocrine regulation of the establishment of spermatogenesis in pigs. Reprod Domest Anim, 43(2):280-287. PMID: 18638136.
- 12. **Caires KC**, de Avila JM, McLean DJ. 2009. Vascular endothelial growth factor A (VEGF) regulates germ cell survival during the establishment of spermatogenesis in the bovine testis. Reproduction, 138(4):667-677. PMID: 19633133.

Submitted Manuscripts in Review

- 1. Moura AR; Santos Jr AR; Losano JDA, Siqueira AFP; Hamilton TRS; Zanella R, Caires KC; Simões R. (2022) Evaluation of sperm and hormonal assessments in Wagyu, Nelore and Angus bulls. Reproduction in Domestic AnimalsSubmitted August 2022.
- 2. **K. Caires**, Stafford-Jones JS. (2020) Corn Silage Production in Hawaii Using Sub-Surface Drip Irrigation and Precision Ag Tools: A Viable Model for Tropical and Subtropical Agriculturalists (in press, CTAHR publications)
- 3. **K.** Caires, B. Mishra, M. DuPonte, M. Fergerstrom, J. Odani and L. Stevens. (2019) Setting the Standards for Semen Collection of Beef Bulls from the Mealani Research Station (in press, CTAHR publications)

Cover Art

- 1. Caires et al., 2012. Endocrinology, Volume 153, Number 2, February 1, 2012
- 2. Caires et al., 2012. Reproductive Toxicology, Volume 33, Number 1, January 2012

Research and Career Highlights

- 1. Peanut Beef and Caldo Verde. Cooking with Dr. Kyle Caires. <u>Cooking Hawaiian Style.</u> April 2021. Hawaiian Entertainment Group. Aired on Spectrum OC16 multiple times in 2021 and 2022.
- 2. One Busy Man: Extension agent is helping livestock producers, near and far. <u>CTAHR NEWS.</u> September 9, 2020
- 3. New Maui Partnership Assists Local Ranches While Providing Food to Those in Need. <u>Maui News.</u> Maui Business Section Feature Article. September 2, 2020
- 4. Hokoana LK. 2019. Kyle Caires knows cows, brings his knowledge to UH-MC. <u>Maui News.</u> KA'ANA MANA'O. October 26, 2019
- 5. "How Stem Cell Technology will Improve Cattle Breeding," <u>Successful Farming Magazine</u>, November 2015 issue, for application of how our research will be the next big thing in cattle breeding.

- 6. "Optimize Herd Bulls' Potency with Proper Management," <u>American Red Angus Magazine</u>, March 2015 issue, for expertise in genetic selection and management of beef cattle.
- 7. "Genetics, Management and Environment Contribute to Bull Fertility," <u>American Red Angus Magazine</u>, February 2015 issue, for findings in sperm defects and application of that research towards improving reproductive success in cattle.
- 8. "Maui native's work in cattle breeding gets recognition," <u>The Maui News</u>, January 18, 2015, for fertility and genetics research.
- 9. "Stem-Cell Research Unlocks the A.I. Barrier," <u>American Red Angus Magazine</u>, January 1, 2015, for research breakthroughs in spermatogonial stem cell development research.
- 10. "Amazing cattle genetics research happening in Georgia. It could be a game changer!" <u>Cattle Business Weekly</u>, January 28, 2015, where it remained the top headline article for 5 weeks.
- 11. "Caires judges 'Super Bowl' of cattle shows," The Maui News, January 30, 2013.
- 12. Schubert C., 2012. WORLD OF REPRODUCTIVE BIOLOGY: Ethanol "Binge" May Harm Testes. Biology of Reproduction. 86(3):1–2

Extension Bulletins / Publications

- 1. **Caires K.** 2021. Dallisgrass Offers Benefits But Beware of Ergot Poisoning! CTAHR publication (AS-6) https://www.ctahr.hawaii.edu/oc/freepubs/pdf/AS-6.pdf
- 2. Yang J, DuPonte M, Vincent D, Caires K, He Y, Correa N, Wall L, Cowell K, Fergerstrom M. 2020. DNA-Based Bull Selection and Artificial Insemination for Grass-Fed Beef Cattle Production. https://www.ctahr.hawaii.edu/oc/freepubs/pdf/AS1.pdf
- 3. Caires K. 2018. Judging Beef Cattle and Oral Reasons: Selection for Market Animals and Breeding Stock (AAS-1). 14 pages. Not available for online download.
- 4. Caires K. 2018. Hurricane Preparedness for Livestock. CTAHR publication (LM-38) https://www.ctahr.hawaii.edu/oc/freepubs/pdf/LM-38.pdf
- 5. Caires K. 2017. Beware of Dallisgrass Staggers. (AS-6) Revised; replaced with new version: https://www.ctahr.hawaii.edu/oc/freepubs/pdf/AS-6.pdf
- 6. **Caires K,** Smith SM, Busboom J, Neibergs JS, Heitstuman M. 2006. Washington State University Lamb 300 Program and Summary. Central Washington Animal Agriculture Team http://www.animalag.wsu.edu/small%20ruminants/2006WSULAMB300--AnimalSummary.pdf

Popular Periodicals

- 1. Zanella R, **Caires K**. 2009. Charolês como base racial ao desencolvimento de uma nova raça mista em combinação com o Wagyu. Campo e Criação (article in Portuguese); http://www.campoecriacao.com.br/site/index.php?p=noticia&id=9948
- 2. Caires K. 2005. OSU Young Cattlemen's Association Update. Oregon Beef Producer, February Issue, p22-23.
- 3. Caires K. 2005. College Leaders Educate Youth About the Beef Industry (solicited for Next Generation section). Angus Journal, April Issue, p58.
- 4. Caires K. 2004. Beef Bowl 2004. Oregon Beef Producer, November Issue, p21.

Leadership Roles

Major Committee Service Assignments

a. Professional Societies

- 2016-17 Chair, Undergraduate Teaching Committee for the Southern Section, American Society of Animal Science (SSASAS), American Society of Animal Science (ASAS), Champagne, IL.
 - Hosted the Poster, Platform sessions, and the Undergraduate Student Competition at the Southern Section ASAS meeting in Franklin, Tennessee. February 2017
- 2013-16 Member, Undergraduate Teaching Committee for the Southern Section, American Society of Animal Science (SSASAS), American Society of Animal Science (ASAS), Champagne, IL.
- 2013-14 Chair, Physiology and Endocrinology Committee, American Society of Animal Science, Champagne, IL.
- 2013-14 Member, Diversification Committee, Society for the Study of Reproduction, Madison, WI.
- 2012-14 Co-Coordinator (with JA Hernandez-Gifford, OKST), Burroughs Wellcome Travel Fellowship Program, 45th Annual Meeting of the Society for the Study of Reproduction, Madison, WI.
- 2011-13 Member, Minority Affairs Committee, Society for the Study of Reproduction, Madison, WI.
- 2011-13 Member, Physiology and Endocrinology Committee, American Society of Animal Science, Champagne, IL.
- 2011-12 Member, Trainee Affairs Committee, Society for the Study of Reproduction, Madison, WI.

b. University Service

- 2016-pres. Member, Animal Science Graduate Faculty, Department of Human Nutrition, Food and Animal Sciences University of Hawaii at Manoa, Honolulu, HI.
- 2016-17 Member, Maui Agricultural Succession Planning and Steering committee, Cooperative Extension Service-CTAHR, Kahului, HI
- 2015-2016. Chair, Animal Science Faculty Search Committees, Berry College, Mount Berry, GA.
- Aug. 2015 Participant, Decoding Graduate School Admissions Process, Berry College Career Center, Mount Berry, GA.
- 2015-16 Member, Museum Committee, School of Mathematical and Natural Sciences, Berry College, Mount Berry, GA.
- 2015 Participant, Scholarship Day, Berry College, Mount Berry, GA.
- 2014-16. Member, Scholarship Day, Berry College, Mount Berry, GA.
- 2014-16. Member, Faculty and Staff Benefits Committee, Berry College, Mount Berry, GA.
- 2014-16. Member, Development of Undergraduate Research Committee, School of Mathematical and Natural Sciences, Berry College, Mount Berry, GA.
- 2014-15 Chair, Faculty Development Committee, Berry College, Mount Berry, GA.
- Sept. 2014 Participant, Decoding Graduate School Admissions Process, Berry College Career Center, Mount Berry, GA.
- 2014-16. Member, Center for Teaching Excellence Committee, Berry College, Mount Berry, GA.
- 2014-16 Member (with Dr. Goldberg), Animal Sciences Scholarship Committee, Berry College, Mount Berry, GA.
- 2013-16. Member, One Health Minor Committee, MNS, Berry College, Mount Berry, GA.
- 2013-14 Chair, Development of Undergraduate Research Committee, School of Mathematical and Natural Sciences, Berry College, Mount Berry, GA.
- 2014 Participant, Scholarship Day, Berry College, Mount Berry, GA.
- 2013-15 Member, Faculty Assembly Ad Hoc Committee on Academic Integrity, Berry College, Mount Berry, GA.
- 2013-15 Member, Faculty Development Committee, Berry College, Mount Berry, GA.
- 2011-12 Participant, Liberal Learning and Civic Mission Workshop (November 3) Berry College, Mount Berry, GA.
- 2012-16. Chemical Safety Officer, Department of Animal Science, Berry College, Mount Berry, GA.

- 2011-12 Participant, Fall Orientation for New Faculty Panel, Provost Office, Berry College, Mount Berry, GA.
- 2011-12 Member, Dairy Forecasting Committee (with Martin Goldberg, DVM), Agriculture Operations Business Office, Berry College, Mount Berry, GA.
- 2010-15 Animal Sciences Representative, Discover Berry Programs, Berry College, Mount Berry, GA.
- 2009-10 Chair, Animal Science Graduate Student Travel Fundraising Committee, Washington State University, Pullman, WA.
- 2006-07 Member, Animal Sciences Chair and Faculty Search Committees, Washington State University, Pullman, WA.
- 2004-05 Public Relations, OSU Steer-A-Year Program, Oregon State University, Corvallis, OR.
- 2003-04 Peer Advisor, Animal Sciences, Oregon State University. Corvallis, OR.
- 2003-04 ANS Representative, Beef Industry Leadership Tour, Oregon Cattlemen's Assoc., Salem, OR.
- 2002-03 Member, Ag Days Planning Committee, College of Agricultural Sciences, Oregon State University, Corvallis, OR.
- 2001-04 Representative, Oregon State University Agriculture Executive Council, Corvallis, OR.
- 2001-02 Assistant Editor, New Fields, College of Agricultural Sciences, Oregon State University, Corvallis, OR.

c. Allied Industry Organizations

- 2019 Delegate, Maui County Farm Bureau, Hawai'i Farm Bureau Annual Meeting, Lahaina, HI
- 2018-pres Board Member, Maui County Farm Bureau, Youth and Producer Education Representative
- 2018-pres Member, Animal Health and Wellbeing Committee, Hawaii Cattlemen's Council, Waimea, HI
- 2018-pres Member, Maui Ag Fest and 4-H Livestock Fair, Planning Committee,
- Delegate, 135th Annual Convention of Delegates, American Angus Association, Columbus, Ohio.
- 2018 Member, Ag Fest Planning Committee, Maui County Farm Bureau
- 2018 Delegate, Maui County Farm Bureau, Hawai'i Farm Bureau Annual Meeting, Kunia, HI
- 2017-pres Chair, Research and Education Committee, South-East Red Angus Association, 2017-present
- 2016-pres Chair, Research and Education Committee, Maui Cattlemen's Association, Kula, HI.
- 2016-pres Member, Livestock Planning Committee, Maui Fair
- 2016-18 Member, Transportation Committee, Hawaii Cattlemen's Council
- 2016-17 Ex-Officio Board Member, Maui County Farm Bureau
- 2016-pres Ex-Officio Board Member, Maui 4-H Livestock Association, 2016-present
- 2016-pres Member, Maui Cattlemen's Association, Kula, HI.
- 2005 Member, Public Lands Committee, Oregon Cattlemen's Association, Salem, OR.
- 2004-05 Young Cattlemen's Association Representative, Oregon Cattlemen's Association, Salem, OR.
- 2004-05 Fundraising Chair, OSU Ringmaster Livestock Show. Corvallis, OR.
- 2004 Master of Ceremony, Oregon Cattlemen's Association Spring Quarterly Meeting. Corvallis, OR.
- 2003-04 Executive Director, Beef Bowl Planning Committee, Oregon Beef Council, Portland, OR.
- 2003-04 YCA Chair, Beef Blitz Community Outreach Program. Oregon Beef Council, Portland, OR.
- 2002-03 Treasurer, Beef Bowl Planning Committee, Oregon Beef Council, Portland, OR

d. Social Organizations

- 2009-10 Member, Tailgate BBQ and Silent Auction Planning Committee, Friends of Animal Science Foundation, Pullman, WA.
- 2006-10 Vice-President/Fundraising Chair, Animal Sciences Graduate Student Association, Washington State University, Pullman, WA.
- 2004-05 President, OSU Animal Welfare Club, Oregon State University, Corvallis, OR.

- 2003-05 President/Public Relations, Young Cattlemen's Association, Oregon State University, Corvallis, OR.
- 2002-05 YCA Participant, Beef Blitz Educational Program, Oregon Beef Council, Portland, OR.
- 2001-05 YCA Participant, Beef Bowl Promotional Event, Oregon State University, Corvallis, OR.

e. Community Service

- 2016-19 Volunteer and donor, Maui Veteran's Association. Kahului, HI
- 2012-14 First year service day project participant, Berry College. Mount Berry, GA.
- 2011-14 Volunteer Judge, Regional Science Fair Competitions, Northwest GA.
- 2002-04 Member, Canned Food Drive Committee, Linn-Benton Community Food Share, Corvallis, OR.

Club Advising

- 2013-pres. Alpha Zeta Agricultural Honorary Society, Berry College Chapter, Berry College, Mount Berry, GA
- 2005-07 Graduate Student Advisor, Block and Bridle Club. Washington State University, Pullman, WA
- 2001-02 Youth Advisor, Kaupakalua Hustler's Club, Maui 4H Livestock Association. Haiku, HI

Professional Societies

- 2011- Member, Minorities in Agriculture, Natural Resources and Related Sciences
- 2007-. Member, American Association for the Advancement of Science
- 2005- Member, Society for the Study of Reproduction
- 2004- Member, American Society of Animal Science
- 2001-. Member, Alpha Lambda Delta Honor Society

Editorial Activity

- 2017- Ad-hoc reviewer, Veterinary Science
- 2017- Ad-hoc reviewer, Research in Veterinary Science
- 2016- Ad-hoc reviewer, International Journal of Biometeorology
- 2016- Ad-hoc reviewer, The Journal of Veterinary Medical Science
- 2014- Ad-hoc reviewer, Journal of Andrology
- 2014- Ad-hoc reviewer, Domestic Animal Endocrinology
- 2014- Ad-hoc reviewer, African Journal of Biotechnology
- 2013- Ad-hoc reviewer, Reproductive System Sexual Disorders
- 2013- Ad-hoc reviewer, Asian Pacific Journal of Reproduction
- 2012- Ad-hoc reviewer, American Society of Animal Science, Physiology and Endocrinology Section
- 2012- Ad-hoc reviewer, Theriogenology Insight
- 2012- Ad-hoc reviewer, BMC Veterinary Research
- 2011- Ad-hoc reviewer, Endocrinology
- 2010- Book reviewer, Peer research reviewer, The NACTA Journal
- 2010- Ad-hoc reviewer, Reproductive Toxicology
- 2007- Ad-hoc reviewer, Biology of Reproduction

Outreach and Extension Activities

a. Invited Talks

2018-19 Numerous invited talks for livestock producers and 4-H youth, more detail provided upon request.

2017 Poster Presenter, Unraveling the population structure and genetic diversity of Angus cattle, Hawaii Cattlemen's Council annual meeting held at Waikaloa Village Marriot, Waikaloa, HI, November 2017 Invited talk, "Pharmaceutical use on the ranch" at Maui Cattlemen's Association fall meeting held at Mayor Hannibal Tavares Community Center, Pukalani, HI, November. 2017 Invited talk, "Sensory evaluation of grass-finished beef" at the Hawaii Cattlemen's mid-year meeting held at Ulupalakua Ranch, Kula, HI, June. 2017 Invited talk, "Successful Farm and Ranch Succession" at the Succession Planning series for Maui's Agricultural Business Owners. Kula Community Center, Kula, HI, January. 2016 Invited Talk, "Emerging Advanced Reproductive Technologies for the Livestock Industry" at the School of Veterinary Medicine and Agronomy at the University of Passo Fundo, RS, Brazil. October 2016 Invited Talk, "Best management practices for sustainable beef production" at the School of Veterinary Medicine and Agronomy at the University of Passo Fundo, RS, Brazil. October 2015 Invited Talk, "New Advances in Estrus Synchronization" at the Gibson Cattle Company Field Day, Rome, GA. May. 2014 Invited Talk, "Recent Advances in Bull Fertility: Understanding Spermatogonial Stem Cells" at the Annual Meeting of the Red Angus Association of America - Southeast Section, Cave Spring, GA. June 21, 2014. 2014 Invited Talk, "Positional candidate genes associated with first service conception rate in cattle" at the Annual Meeting of the Red Angus Association of America – Southeast Section, Cave Spring, GA. June 21, 2014. (Research collaboration with Dr. Sunday Peters). 2014 Invited Talk, "From QTL inference to genetic diversity of Adamtsl1: A positional candidate for first service conception rate in cattle" at the Florida/American Brahman Conference, February 20, Kissimmee, FL. (Research collaboration with Dr. Sunday Peters). Seminar, "Pregnancy Diagnosis in Cattle", Artificial Insemination Short Course, Washington State 2013 University. Pullman, WA. August. 2011 Invited Talk, Multiple Ovulation and Embryo Transfer, Jersey Genetics Enterprise, Rollin's Dairy, Berry College, GA. November 17. 2010 Seminar, Whole Genome Selection in Dairy Cattle. Jersey Genetics Enterprise at Berry College, GA. November 4. Invited Talk, Feeding Market Steers for Show Ring Success. Kaupakalua Hustler's 4H Livestock Club. 2008 Haiku, HI. December 24. 2007 Invited Talk/Clinic, Beef Selection and Showmanship Clinics. 4-H Youth Development, University of Idaho/Nez -Perce County Extension; Nez Perce County Fair. Lewiston, ID. September 20-21. 2007 Invited Talk, Estrous Synchronization and Artificial Insemination. Cougar Youth Weekend, Dairy Club. Washington State University, Pullman, WA. April. 2006 Invited Talk, Use of CiDRs in a Dairy Herds Reproductive Management Program. Cooperative University Dairy Students Program. Washington State University, Pullman, WA. October. 2006 Invited Talk, Beef and Lamb Carcass Evaluation. Maui 4-H Youth Development. CTAHR Cooperative Extension Service, University of Hawaii, Makawao, HI. June 19. 2005 Invited Talk, Quality Grades and Yield Grades in Beef Carcasses. Whitman County 4-H Youth Development, Colfax, WA. November.

- 2003 Poster Presenter, Oregon's Beef and Dairy Industries, Willamette Valley Agricultural Expo. Linn County Fair and Expo Center. Albany, OR. November 18-20.
- Plenary Seminar, Beef Cattle Production in Hawaii. Annual Meeting and Tradeshow for the American Wagyu Association. Reno, NV. December 1.
- 2001-02 Invited Talk, Value Added Marketing Systems for Feeder Calves. Several talks given in venues sponsored by the Oregon Cattlemen's Association. December.

b. Practicums, Workshops and Clinics

- 2018-19 Numerous educational workshops for livestock producers and 4-H youth.
- Youth Workshop, Advanced topics in livestock evaluation: goats, sheep and swine evaluation (three class series). The workshop included youth from Maui and Hawaii counties, and was held at Double D Ranch and Ahualoa Hog Farm, Laupahoe, HI, November 19.
- Youth Workshop, Advanced topics in livestock evaluation: breeding heifer and market steer evaluation (six class series). The workshop included youth from Maui and Hawaii counties, and was held at Parker Ranch Dairy Fence Center, Kamuela, HI, November 18.
- 2017 Practicum, Pregnancy diagnosis through effective palpation, held at Kaupo Ranch LTD, Kaupo, HI, October
- 2017 Youth Practicum, Meats Judging and Beef Retail Identification (2-part series). Maui County 4-H Livestock Association, Part 1 held at Lopes Farm, Haiku, HI. Part 2 held at Maui Cattle Company, Kahului, HI. June
- Workshop, Beef Carcass Cutting Demonstration and Beef Retail Identification. Maui County 4-H Livestock Association, Cooperative Extension Service. Held at Maui Cattle Company, Kahului, HI. JunePlatform Talk,
- 2017 Statewide, Two-day Workshops to Support Grass-finished Beef Production in Maui (Kahului and Makawao), Kauai (Lihue), and Hawaii (Mealani Station) counties, CTAHR Livestock Extension Group (LEG), May.
- 2017 Beef Steer Showmanship Clinics (3-part series). Maui 4-H Livestock Association, Louis Cambra Arena. Makawao, HI. March, April and May.
- Fitting and Grooming Clinics for Beef Steers and Goats. (4-part series). Maui 4-H Livestock Association, Lopes Farm (Haiku, HI (April, June) Sakugawa Farms. Omapio, HI. (May, June)
- Workshop, Succession Planning Series (four-part) for Maui's Agricultural Business Owners. Kula Community Center, Kula, HI, January 18, January 25, February 1, February 8.
- 2016-17 Workshops, Livestock Evaluation Series (25-meetings), Maui 4-H Livestock Association. The series ran from November to May and workshops were held at various locations that include Lopes Farm, Caires Farms, Sakugawa Farms, Vida Farms, L2S Ranch, Haleakala Ranch.
- Workshop, Pork Quality Assurance Plus Certification Program. Cooperative Extension Service, Kahului, HI. November
- Workshop, Livestock Judging Clinics, FFA Youth Development, Rockmart HS FFA and Polk County Cattlemen's Association. Rockmart. GA. November 21.
- Workshop, Environmental and Contagious Mastitis Pathogens, Rollin's Ruminant Research Center, Berry College, GA. November.
- Beef Steer Fitting and Showmanship Clinic. Kaupakalua Hustler's 4H Livestock Club. Kaupakalua Arena. Haiku, HI. May 26.
- Workshop, Udder Biology and Mastitis Pathogens, Rollin's Ruminant Research Center, Berry College, GA. November.

2011 Practicum, Reproductive Tract Scoring of Yearling Heifers, Rollin's Ruminant Research Center, Berry College, GA. December 19. 2011 Practicum, Rectal Palpation and Bovine Ultrasonagraphy, Rollin's Dairy, Berry College, GA. November 2011 Practicum, Assisted campus veterinarian (Martin Goldberg, DVM) with Bovine Necropsy, Preveterinary Club, Berry College, GA. April 12. 2010 Workshop, Genomics and Marker Assisted Selection. Jersey Genetics Enterprise, Rollin's Dairy, Berry College, GA. November 5. 2010 Practicum, Placentation and Fetal Development in Dairy Cows: Cougar Youth Weekend, Washington State University Dairy Club, Pullman, WA. April. Practicum, Reproduction Management in Dairy Cows. Cougar Youth Weekend, Washington State 2009 University Dairy Club, Pullman, WA. April 18. Practicum, Reproduction in Dairy Bulls. Cougar Youth Weekend, Washington State University Dairy 2008 Club. Pullman, WA. April 19. 2006 Practicum, Proactive Approach to Dairy Cattle Evaluation for High School Seniors: WSU Dairy Club. Washington State University, Pullman, WA. April 15. 2006 Practicum, Pork Carcass Cutting Demonstration. Student Swine Cooperative, Washington State University, Pullman, WA. March. Instructor, Live Animal Carcass Evaluation and Oral Reasons Clinic. 4-H Youth Development, Oregon 2005 State University/Harney County Extension; Harney County Fair. Burns, OR. September 8-9 Invited Talk, Beef and Swine Oral Reasons Clinic, Benton County Wranglers, 4-H Youth Development, 2004 Oregon State University/Benton County Extension; February. Philomath, OR 2002-03 Co-Instructor (with Allison Krahn), Youth Dairy Judging Clinics, 4-H Youth Development, Benton County Extension. 2002 Invited Talk and Practicum, Artificial Insemination and Embryo Transfer in Cattle. Kaupakalua Hustler's 4H Livestock Club, Woodrose Ranch. Haiku, HI. December 24 c. Short Course Instruction 2017-19 Instructor, Cattle and Swine Artificial Insemination Short Course, Numerous times, Maui County. 2013 Instructor, Artificial Insemination Short Course, Department of Animal Sciences and School of Veterinary Medicine, Washington State University. Pullman, WA. August. 2007-15 Coordinator/Instructor, Artificial Insemination Short Course, Various County Cattlemen's Associations in the states of Washington, Georgia and Alabama. 2006 Instructor, Meat Animal Retail Product Evaluation, WSU Lamb 300 Short Course. Washington State University, Pullman, WA October 5-7. 2003 Co-Instructor, All West Select Sires Artificial Insemination Short Course at the Lebanon Livestock Auction Yard. Lebanon, OR. March 3-6. d. Contest Officiating 2017-19 Judge, Kauai County 4-H Livestock Show and Sale. Market Classes of Beef Cattle, Swine, Sheep, Goats, Meat. Kauai County 4-H Livestock Association. Lihue, HI. August Cattle Judge, Maui County Livestock Exposition. Breeding and Market Classes of Beef Cattle. Maui Fair 2017-19 Association. Kahului, HI. October 2017 Official, Hawaii State 4H Livestock Judging Contest. State Farm Fair, Kualoa Ranch, Kaneohe, HI. July

2017-19	Judge, Oahu County 4-H Livestock Show and Sale. Market and Breeding Classes of Beef Cattle, Swine, Sheep, Goats, Meat Rabbits, Hamsters, Guinea Pigs. Oahu County 4-H Livestock Association. Waianae, HI. June
2017	Coordinator and Judge, Beef, Pork and Lamb Carcass Exposition. Maui County 4-H Association and CTAHR - Cooperative Extension Service, Held at Oskie Rice Arena Clubhouse, Makawao, HI. June 19.
2017	Host and Contest Official, Maui County 4-H Livestock Judging Contest. Maui County 4-H Association and Cooperative Extension Service, Omapio, HI. May.
2016	Judge, Maui County Livestock Exposition. Breeding and Market Classes of Beef Cattle and Goats. Maui Fair Association. Kahului, HI.
2015	Judge, Tri-State Livestock Exposition. Breeding, Showmanship and Market Classes of Beef, Dairy and Lambs. Randolph County 4-H and Cooperative Extension Service, Wedowee, AL. October 24-25.
2013	Judge, National Wagyu Cattle Show, National Western Stock Show, Denver, CO. January 22.
2010	Proctor, Retail Product Quiz, Washington FFA CDE Days Meat Judging Contest, Pullman, WA. May 15.
2006-07	Official, Washington Steer of Merit Contest. Colfax, WA.
2005-07	Head Official, Whitman County 4H/FFA Livestock Judging Contest. Sept 10 (2005), Sept 9 (2006), Sept 8 (2007) Colfax, WA.
2005	Beef Official, OSU/LBCC Classic Youth Livestock Show. Corvallis, OR.
2004-05	Beef Official, Pacific International Youth Livestock Exposition, Prineville, OR.
2002-04	Student Coordinator, Oregon FFA CDE Days Livestock and Meats Judging Contest. Corvallis, OR.
2002-04	Official, OSU Ringmaster Livestock Show. Benton County Fairgrounds. Corvallis, OR.
2002-04	Official, Linn-Benton County 4H/FFA Livestock Judging Contest. Corvallis, OR.
2001	Official, Hawaii State 4H Livestock Judging Contest. Honolulu, HI. August 1-2.
e. Promotic	onal Events
2018-19	Grass-finished beef and value added beef products promotion. Taste of the Hawaiian Range Event. Waimea, HI. August.
2017	Local pork promotion – providing free pork samples and educational content to public. Hawaii Pork Industry Association, Cooperative Extension Service. Held at Hawaii State Farm Fair, Kaneohe, HI. July
2017	Dairy foods demonstration, Cooperative Extension Service, Maui County 4-H Livestock Association and Maui County Farm Bureau. Held at Maui's Agricultural Fest, Waikapu, HI. April 1; afternoon
2017	Grass-finished beef promotion. Informal sensory panel evaluation of grassfed beef from Maui's ranches, Cooperative Extension Service. Held at Maui's Agricultural Fest, Waikapu, HI. April; morning
2016-17	Dairy industry and milk products promotion with robotic milk cow, Cooperative Extension Service and Maui County Farm Bureau. Booth at Maui County Fair. Kahului, HI. October

Graduate Students

Supervisory Responsibilities in Laboratory or Outreach Setting with Undergraduates and Graduate Students

a. University of Hawaii (1 student)

2017 Luiza Lanner Silveira, Pursuing Doctor of Veterinary Medicine. Research Topic: Applied Reprouctive Physiology, Theriogenology, Forage Production, Livestock Management. (current position: Undergraduate Student). <u>Project status: completed.</u>

c. Washington State University (12 students). Information available upon request

Conferences/Presentations

Invited and Contributed Presentations

- 1. Platform Talk, "The Economic Viability and the Embryo Production by the Use of IVF and SOV Techniques in Wagyu Cattle," at the XXIII Brazilian Congress of Animal Reproduction held in Gramado, RS, Brazil. 2019
- 2. Platform Talk, "Characterization of Vaginal Tract Microbiota in Ewes Synchronized With Intravaginal Progesterone Implants," at the XXIVth Annual Meeting of the Brazilian Society of Embryo Technology in Florianopolis, Brazil, held August 16–19, 2018.
 - a. selected for presentation during the "High Impact Advanced Reproductive Technologies" session
- 3. Platform Talk, "New and improved superovulation protocol for use in Wagyu cows," at the XXIVth Annual Meeting of the Brazilian Society of Embryo Technology in Florianopolis, Brazil, held August 16–19, 2018.
- 4. Platform Talk, "Estrus Synchronization: Lessons from work in Hawaii's subtropical climate" at the Annual Meeting of the Red Angus Association of America, and Reds in the Rockies Convention, Southeast Section Colorado Springs, CO. September 2017.
- 5. Platform Talk, "Genetic selection for grassfed beef programs" at the Annual Meeting of the Red Angus Association of America, and Reds in the Rockies Convention, Southeast Section Colorado Springs, CO. September 2017.
- 6. Platform Talk, "Therapeutic potential of spermatogonial stem cells for treating human male infertility" at Medical School of University of Passo Fundo, RS, Brazil. October of 2016.
- 7. Platform Talk, "Spermatogonial stem cell technology in bulls" at the first Buiatrics Conference of the Conesul. Canella, Rio Grande do Sul. October 2016
- 8. Platform Talk, "Genetic selection for fertility and feed efficiency in beef cattle" at the first Buiatrics Conference of the Conesul. Canella, Rio Grande do Sul. October 2016
- 9. Platform Talk, "Recent Advances in Bull Fertility: Understanding Spermatogonial Stem Cells" at the Annual Meeting of the Red Angus Association of America Southeast Section, Cave Spring, GA. June 21, 2014.
- 10. Platform Talk, "Biological Activity of Spermatogonial Stem Cells in Bulls" co-authored with *Averi Simpson* (13C) and *Kadie Cheeks* (14C) at the Florida/American Brahman Conference, Kissimmee, FL. February 20, 2014.
- 11. Plenary Seminar, "Factors regulating of the biological activity of Sertoli cells in the neonatal boar testis", 13th Annual WSU/UI Center for Reproductive Biology Retreat, Orofino, ID. 2009.

<u>j. Published Abstracts at International Meetings.</u> (Student names are italicized)

- 1. Caires KC. 2016, "A novel approach to teach sustainable animal breeding and genetics practices to undergraduates in the animal sciences" Annual Conference North American Colleges and Teachers of Agriculture (NACTA), University of Hawaii at Manoa, June 2016. Selected for platform presentation
- 2. Caires KC, Chen LY, *Lemcke RA*, *Seigler L*. Testis tissue explant culture supports the viability of equine spermatogonial stem cells. Joint Annual Meeting of the Joint Annual Meeting of Animal

- Science Federations (ADSA-AMPA-ASAS-CSAS-WSASAS). Orlando, FL. July 12-16, 2015. <u>Selected for poster presentation</u>
- 3. Ozoje MO, Peters SO, **Caires KC**, Kizilkaya K. Growth curve analyses of three turkey genotypes in the hot humid tropics using a Bayesian mixed model approach. Joint Annual Meeting of the Joint Annual Meeting of Animal Science Federations (ADSA-AMPA-ASAS-CSAS-WSASAS). Orlando, FL. July 12-16, 2015. <u>Selected for poster presentation</u>
- 4. **Caires KC**. "Novel Approaches to Teach Histology to Undergraduates in the Reproductive Sciences." Annual Conference North American Colleges and Teachers of Agriculture (NACTA), University of Georgia, June 12-20, 2015. <u>Selected for poster presentation</u>
- 5. *Cheeks K*, McLean DJ, **Caires KC**. VEGFA regulates the biological activity of germ cells in bovine testis tissue grafts. Annual Meeting of the American Society of Andrology and the XXII North American Testis Workshop. San Antonio, TX. April 10-13, 2013. <u>Selected for oral and poster presentation</u>
- 6. **Caires KC**, *Bellefuille MJ*, McLean DJ. Factors regulating of the biological activity of Sertoli cells in the neonatal boar testis. 45th Annual Meeting of the Society for the Study of Reproduction. Portland, OR. July 31, 2012. <u>Selected for poster presentation</u>
- 7. McLean DJ, Caires KC, de Avila JM, Cupp AS. VEGFA family isoforms regulate spermatogonial stem cell homeostasis *in vivo*. 44th Annual Meeting of the Society for the Study of Reproduction. Portland, OR. July 31, 2011. Selected for platform presentation (Given by DJ McLean)
- 8. **Caires KC**, McLean DJ. Functional analysis of spermatogonial stem cell self-renewal during initiation of spermatogenesis in mice. 44th Annual Meeting of the Society for the Study of Reproduction. Portland, OR. July 31, 2011. <u>Selected for platform presentation</u>
- 9. **Caires KC**, McLean DJ. Characterization of the spermatogonial stem cell niche in the seminiferous tubule of the mouse. 43rd Annual Meeting of the Society for the Study of Reproduction. Milwaulke, WI. Aug. 2, 2010. <u>Selected for platform presentation</u>
- 10. **Caires KC**, Schmidt JA, Oliver AP, de Avila JM, McLean DJ. Endocrine regulation of the establishment of spermatogenesis is pigs. 16th International Congress on Animal Reproduction. Budapest, Hungary 2007. <u>Selected for platform presentation</u> (Given by DJ McLean).
- 11. **Caires KC**, de Avila JM, McLean DJ. VEGF-A stimulates germ cell survival and differentiation in bovine testis xenografts. 40th Annual Meeting of the Society for the Study of Reproduction, San Antonio, TX. 2007. Selected for platform presentation

1. Published Abstracts at Regional Meetings and Symposia. (Student names are italicized)

- 1. Caires KC. Use of Genomics Technologies to Facilitate Rapid Genetic Improvement of Economically Relevant Traits (ERTs) for Beef Cattle Production in Hawai'i. Hawai'i Ag Conference. Honolulu, HI. 2019
- 2. Caires KC.An interactive decision-support tool for students and livestock producers to integrate sustainable animal breeding and genetics principles into real-world production environments. Hawai'i Ag Conference. Honolulu, HI. 2019
- 3. *Stafford-Jones S* and **Caires KC.** Feedstuffs Production Using Sub-Surface Drip Irrigation and Precision Ag Tools: A Viable Model for Tropical and Subtropical Agriculturalists. Hawai'i Ag Conference 2019. Honolulu, HI
- 4. *Lemcke R*, Zanella R, **Caires KC**. Investigating the population structure and genetic diversity of Angus cattle. American Society of Animal Science Southern Section Regional Meetings. Orlando, Florida. February 2–5, 2013

- 5. Kitts-Morgan SE, Caires KC, Duncan LA, Hilburn KA and Ellis KE. Evaluating the ecological impact of free-ranging cats in Northwest Georgia using home-range and diet analyses. 14th Wildlife Damage Conference, Nebraska City, NE. 2011
- 6. Caires KC, Shima CS, Avila JM McLean DJ. Acute neonatal ethanol exposure disrupts spermatogonial stem cell homeostasis during testis development in mice. 14th WSU Center for Reproductive Biology Retreat, Spokane, WA and Northwest Reproductive Sciences Symposium, Spokane, WA. 2010
- 7. Caires KC, Bellefeuille MJ, de Avila JM, McLean DJ. Factors regulating of the biological activity of Sertoli cells in the neonatal boar testis, 13th WSU Center for Reproductive Biology Retreat, Orofino, ID. 2009
- 8. Caires KC, Avila JM McLean DJ. Endocrine Regulation of the Establishment of Spermatogenesis in the Pig Testis, 12th WSU Center for Reproductive Biology Retreat, Orofino, ID. 2008
- 9. Caires KC, Avila JM, and McLean DJ. Vascular Endothelial Growth Factor Regulates Germ Cell Survival and Differentiation in Bovine Testis Xenografts, 11th WSU Center for Reproductive Biology Retreat, Orofino, ID. 2007
- Caires KC, McLean DJ. The Dynamics of Sertoli Cell Proliferation in the Developing Boar Testis: New Insights Obtained from Testis Xenografting. Northwest Reproductive Sciences Symposium, Moscow, ID. 2006
- 11. Caires KC, McLean DJ. Sperm Production by Porcine Testis Xenografts, 10th WSU Center for Reproductive Biology Retreat. Dworshak, ID. 2006

Grantsmanship and Funding Activity

Authored

- 1. Caires KC, 2022. Forage and Livestock Research Grant. Maui Cattlemen's Association, Subawardee, County Office of Economic Development Grant, Requested \$7,000 (funded)
- 2. Caires KC, 2022. Phase III Learning Center for Livestock Producers and 4-H Youth in Maui County. Maui County Office of Economic Development Grant, Requested \$30,000 (funded).
- 3. Caires KC, 2021. 2022 Maui Ag Fest and 4-H Livestock Fair. Maui County Office of Economic Development Grant, Requested \$55,000 (funded)
- 4. Caires KC, 2021. Forage and Livestock Research Grant. Maui Cattlemen's Association, Subawardee, County Office of Economic Development Grant, Requested \$7,000 (funded)
- 5. Caires KC, 2021. Multipurpose Covered Area for Livestock Producers and 4-H Youth in Maui County. Maui County Office of Economic Development Grant, Requested \$30,000 (funded).
- 6. Caires KC, 2020. 2021 Maui Ag Fest and 4-H Livestock Fair. Maui County Office of Economic Development Grant, Requested \$35,000 (funded)
- 7. Caires KC, 2020. Forage and Livestock Research Grant. Maui Cattlemen's Association, Subawardee, County Office of Economic Development Grant, Requested \$12,000 (funded)
- 8. **Caires KC**, 2020. Development of a Livestock Learning Center for Livestock Producers and 4-H Youth. Maui County Office of Economic Development Grant, Requested \$22,400 (funded).
- 9. Caires KC, 2019. Forage and Livestock Research Grant. Maui Cattlemen's Association, Subawardee, County Office of Economic Development Grant, Requested \$6,000 (funded)
- 10. Caires KC, 2018. Advanced Reproductive Technologies Workshops for Livestock Producers and 4-H Youth. Maui County Office of Economic Development Grant, Requested \$22,000 (funded)

- 11. Caires KC, 2018. No-Till Planting A Modern Approach to Pasture Establishment. Maui County Office of Economic Development Grant, Requested \$24,000 (funded)
- 12. Caires KC, 2018. 2019 Maui 4-H Livestock Fair Ag Fest Merger. Maui County Office of Economic Development Grant, Requested \$35,000 (funded)
- 13. Caires KC, 2018. Forage Variety Trials and Livestock Research Grant. Maui Cattlemen's Association, Sub-awardee, County Office of Economic Development Grant, Requested \$6,000 (funded)
- 14. Caires KC, 2017. Upcountry Fair 2018. Maui County Office of Economic Development Grant, Requested \$35,000 (funded)
- 15. Caires KC, 2017. 4-Hers A.C.H.I.E.V.E. (Ag-related Competitiveness Highlighting Individual Excellence & Valuing Education) Grant. Maui County Office of Economic Development Grant, \$8635.00 (funded).
- 16. Caires KC, 2017. Upcountry Fair 2017. Maui County Office of Economic Development Grant, Requested \$32,000 (funded)
- **17.** Caires KC. November 2015. Extramural Grant Supporting Swine Reproductive Biology Research. Carter Foundation, Lake Wales, FL. Caires PI; \$2,000.00 (funded)
- **18.** Caires KC. Testis Tissue Explant Culture Supports the Viability of Equine Spermatogonia Stem Cells. MNS Travel Grant to attend the Joint Annual Meeting of Animal Science Federations (ADSA-AMPA-ASAS-CSAS-WSASAS) in Orlando, FL. July 2014. \$1738.00 (funded)
- **19.** Caires, KC. and Wilson JA. "Genomic study of muscle development in yearling horses." November 4, 2014. Faculty Development Grant. COI; \$5,323.00 (funded)
- **20.** Caires KC. 2014. Extramural Grant Supporting Reproductive Biology Research. Carter Foundation, Lake Wales, FL. Caires PI; \$2,000.00 (funded)
- **21.** Caires KC. MNS Travel Grant to attend the Joint Annual Meeting of Animal Science Federations (ADSA-AMPA-ASAS-CSAS-WSASAS) in Kansas City, MO. July 2014. (funded)
- 22. Caires KC. 2014. MNS Development of Undergraduates through Research Grant, "Investigating the response to heat stress in undifferentiated spermatogonia." \$770.00 (funded)
- 23. Caires KC. 2013. Faculty Development Grant, "Bovine Spermatogonia Stem Cell Isolation." Berry College. Caires PI; \$2,000.00 (funded)
- 24. Caires KC. 2013. Extramural Grant: Factors Regulating Bovine Spermatogonia Stem Cell Homeostasis. Carter Foundation, Lake Wales, FL. Caires PI; \$1,000.00 (funded)
- 25. Caires KC. 2012. Extramural Grant: Developing a PCR-based method for sexing of bovine embryos. Carter Foundation, Lake Wales, FL. Caires PI; \$2,200.00 (funded)
- 26. Caires KC. 2011. Extramural Grant: Increasing the educational effectiveness of microanatomy instruction in the reproductive sciences. Carter Foundation, Lake Wales, FL. Caires PI; \$2,494.00 (funded)
- 27. Caires KC. 2011. Internal Equipment Funding Request: Acquisition of a micro-volume UV-vis spectrophotometer for nucleic acid and protein quantification. Office of the Provost at Berry College. Caires PI; \$9,975.00 (funded)

- 1. Price M, Steensma K, Shwiff S, Elser J, Caires K, Thorne M. 2022. Wildlife Impacts on Agroecosystems and Culture: Achieving Integrated Pest Management of Invasive Ungulates in Hawai'i. USDA WSARE. Requested \$349,979 (funded)
- 2. Odani J, Caires KC, 2017. Validation and application of a PCR assay for Rat Lungworm infection in dogs and cats in Maui County. Maui County Office of Economic Development Grant, Requested \$12,364, not awarded
- 3. Settlage R. and Caires KC, 2016. 4-H Learning Lab Kits For Maui, Molokai and Lanai. Maui County Office of Economic Development Grant, \$9300.00 (funded).
- 4. Peters, SO and Caires KC. 2015. High Resolution Genetic and Epigenetic Analysis of Early Pregnancy QTL Region on Bta2 in US Cattle Breeds. USDA NIFA Food Security Seed Grant. Caires Co-I, (PI: Peters) \$149,650.00 (not funded)
- 5. Zanella R and Caires KC. 2012. Effects of Celmanex on the Intestinal Inflammatory Response to Viable and Non-Viable *Mycobacterium avium subspecies paratuberculosis* exposure. Varied Industries Corporation (Vi-COR) Dairy Division, Co-PI, \$2,305.25 (funded)
- 6. Caires KC and McLean DJ. 2010. Acute Ethanol Exposure Disrupts Spermatogonial Stem Cell Homeostasis. Alcohol and Drug Abuse Program (ADARP) at Washington State University. McLean PI; \$17,528 (not funded)
- 7. Caires KC and McLean DJ. 2009. Investigation of Factors Regulating Oocyte Quality and Reproductive Success in Ewes. Washington Sheep Producers Endowment. McLean PI; \$3,500 (funded)
- 8. Caires KC and McLean DJ. 2009. Endocrine Regulation of Boar Testis Development and Sperm Production. United States Department of Agriculture Agriculture and Food Research Initiative NRI, Animal Reproduction Program priority area "Gonadal function, including production, function and preservation of gametes". McLean PI; \$120,000 (not funded)
- 9. Caires KC and McLean DJ. 2008. Maximizing the Fertility of Dairy Cattle. Emerging Research Issues: Value-added agricultural production systems: 10. Improving farm profitability through new uses of crops, livestock and by-products. McLean PI; \$69,632 (not funded)

Participated in:

- 1. Wood L, Unger K. Sandlin D. Sandlin. M, Caires KC. (2018) Establish Quality Standards For Local Pasture-Raised Beef Focusing On Tenderness And Palatability To Assist All Segments Of The Industry. HDOA. \$99,000 (funded)
- 2. Reeves C (PI). Caires K, Nazario-Leary C. (participants) Beginning Farmer Plots Grant. Hawaii Department of Agriculture. Caires portion is \$20,000 (funded)
- 3. Cupp AS and McLean DJ. 2009. VEGF Isoform Regulation of Spermatogonial Stem Cells. Nebraska Department of Health and Human Services Research Grants. McLean Co-PI; \$150,000 (funded).
- 4. McLean DJ. 2007. Ethanol Regulation of Spermatogonial Stem Cell Proliferation. Alcohol and Drug Abuse Program (ADARP) at Washington State University. McLean PI; \$35,000 (funded)
- 5. McLean DJ. 2005. Investigating Factors Regulating Sperm Production in Bovine Testis Xenografts. Emerging Research Issues: Value-added agricultural production systems: 10. Improving farm profitability through new uses of crops, livestock and by-products. McLean PI; (not funded).