

Curriculum Vitae

NAME: Christianne Magee

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Pronouns: she/her/ella

EDUCATION

2000 BS (Biotechnology), Worcester Polytechnic Institute, Worcester, MA, USA
2004 DVM, Cummings School of Veterinary Medicine at Tufts University, North Grafton, MA, USA
2007 MS (Clinical Sciences), Colorado State University, Fort Collins, CO, USA
2007 Diplomate, American College of Theriogenologists (equine reproduction specialist)
2010 PhD (Biomedical Sciences), Colorado State University, Fort Collins, CO, USA

CV SECTION 1: EMPLOYMENT HISTORY AND AWARDS

ACADEMIC POSITIONS

2023-present Associate Department Head, Director of Undergraduate Programs, Department of Biomedical Sciences, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO
2021-present Associate Professor (with tenure) Department of Biomedical Sciences, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO
2018-2021 Assistant Professor, Regular Appointment (tenure track), Department of Biomedical Sciences, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO
2012-2018 Assistant Professor, Special Appointment (non-tenure track), Department of Biomedical Sciences, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins, CO

JOB DESCRIPTION

	%Teaching/ Mentoring	% Research / Creative Activity	% Service / Outreach
2023-present	45	15	40
2018- 2023	65	20	15
2012-2018	65	15	20

HONORS AND AWARDS (---since last promotion---)

2026 *Distinguished Veterinary Educator Award – Emerging Leader*, Awarded by the American Association of Veterinary Medical Colleges, nominated by Colorado State University leadership
Employee Appreciation Board Award – Animal Anatomy Team recognized for commitment to the educational mission at Colorado State University
2025 Nomination, *Best Teacher Award*, Colorado State University
Nomination of Animal Anatomy Teaching Team, *Living our Values Award*, College of Veterinary Medicine and Biomedical Sciences, Colorado State University
2024 *The Provost's N. Preston Davis Award for Instructional Innovation Award*, Colorado State University
Nomination, *Multicultural Staff and Faculty Council Distinguished Service Award*, Colorado State University
Nomination, *Career Impact Award*, Colorado State University
2023 *Faculty Advising Award*, College of Veterinary Medicine and Biomedical Sciences, Colorado State University
2022 *Veterinarian of the Year*, Colorado Veterinary Medical Association. Nominated by students and faculty for my service and dedication to advancing education in the veterinary profession

2011-2015 *Clinical Award*, Contraception and Infertility Loan Repayment Program, National Institute of Child Health and Human Development, National Institutes of Health
2013 *Teaching Fellow*, The Institute for Teaching and Learning (TILT) at Colorado State University
2009 *Young Investigator Award*, American Quarter Horse Foundation
2008 *Storm Cat Career Advancement Award*, Grayson Jockey Club Foundation
2008-2010 *Trainee*, NIH Training Grant in Mammalian Reproductive Biology (T32-HD007031). Animal Reproduction and Biotechnology Laboratory, Department of Biomedical Sciences, Colorado State University, Fort Collins, CO

CV SECTION 2: PUBLICATIONS/SCHOLARLY RECORD

PUBLISHED WORKS

Refereed Journal Articles (*corresponding author, RCR: iCite Relative Citation Ratio, ---since last promotion---):

1. Bronnenberg T, Kirkley KS, **Magee C**, Murtazina DA, Stewart WC, Nett TM, Navratil AM, Cantlon JD, Cherrington BD, Clay CM. 2026. Obesity Alters the Estrogen-Induced Luteinizing Hormone Surge in Ovariectomized Ewes. *Biol Reproduction*. Epub ahead of print. PMID: 42421243.

2. **Magee C**, Kouri J, Cherrington B, Cantlon J, Murtazina D, Farmerie T, Davidsen M, Nett T, *Clay C. 2025 Evidence for divergent endocrine regulation of the murine and ovine GnRH receptor gene promoters. *Frontiers in Endocrinology* 16:1597028. 1 citation.
 3. Svenson G, Arnold O, Vigil P, Nishi N, ***Magee C**. 2025. The benefits of mentoring under-resourced high schoolers in veterinary medicine and One Health through a free, experiential college course. *Journal of Youth Development*. 20(2):94–112. doi: 10.34068/jyd.20.02.09.
 4. Martin JF, Linton A, Svenson GR, Garrett AC, Mango DW, Svec PM, ***Magee C**. 2024. Landmark Positioning on a Map: An Alternative Measure of Spatial Ability for Identifying Students who may Benefit from Learning Gross Anatomy with Virtual Reality. *J Vet Med Ed* 52(5):615-623. PMID: 39504204. 1 citation.
 5. Martin JF, Linton A, Garrett AC, Mango DW, Svec PM, ***Magee C**. 2024. Relationship between the relative timing of prosection and dissection experiences and laboratory examination performance in a gross anatomy course. *Anatomical Sciences Education* 17:1299-1307. PMID: 38954745. 1 citation.
 6. Thompson RE, Meyers MA, Palmer J, Veeramachaneni DNR, **Magee C**, De Mestre AM, Antczak DF, Hollinshead FK. 2023. Production of mare chorionic girdle organoids that secrete equine chorionic gonadotropin. *International Journal of Molecular Sciences*. *Int J Mol Sci* 24:9538. PMID: 37298490. 12 citations. RCR 1.06.
 7. Martin JF, Arnold OR, Linton A, Jones JD, Garrett AC, Mango DW, Juarez KA, Gloeckner G, ***Magee C**. 2023. How Virtual Animal Anatomy Facilitated a Successful Transition to Online Instruction and Supported Student Learning During the Coronavirus Pandemic. *Anatomia, Histologia, Embryologia* 52:36-49. PMID: 35243669. 8 citations. RCR 1.32.
 8. Linton A, Garrett AC, Ivie KR, Jones JD, Martin JF, Delcambre JD, ***Magee C**. 2022. Enhancing anatomical instruction: Impact of a virtual canine anatomy program on learning outcomes. *Anatomical Sciences Education* 15(2):330-340. PMID: 33838080. 17 citations. RCR 2.40.
 9. Lee S, Wendland TM, Rao S, ***Magee C**. 2021. Orthotic Device Use in Canine Patients: Owner Perception of Quality of Life for Owners and Patients. *Frontiers in Veterinary Science* 8:1264. PMID: 34805329. 17 citations. RCR 0.77.
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10. *Hollinshead FK, Ontiveros M, Burns JG, **Magee C**, Hanlon DW. 2020. Factors influencing parentage ratio in canine dual-sired litters. *Theriogenology* 158:24-30. PMID: 32927197. 8 citations. RCR 0.31.
 11. ***Magee C**, Bruemmer JE, Kirkley KS, Sylvester LA, Runyan B, Nett TM, Squires EL, Clay CM. 2020. Kisspeptin has an independent and direct effect on the pituitary gland in the mare. *Theriogenology* 157:199-209. PMID: 32814247. 7 citations. RCR 0.28.
 12. ***Magee C**, McDaniel S, Turk P, Striegel N, Roman-Muniz IN. 2020. Information-Seeking Preferences of the Colorado Equine Industry for Distribution of Disease Outbreak Information. *J Equine Vet Sci* 91:103126. PMID: 32684264. 1 citation.
 13. Murtazina DA, Arreguin-Arevalo JA, Cantlon JD, Boroojeny AE, Shrestha A, Hicks JA, **Magee C**, Kirkley KS, Jones KL, Nett TM, Chitsaz H, *Clay CM. 2020. Enrichment of ovine gonadotropes via adenovirus gene targeting enhances assessment of transcriptional changes in response to estradiol. *Biology of Reproduction* 102:156-169. PMID: 31504222. 4 citations. RCR 0.21.
 14. Urias-Castro CA, Arreguin-Arevalo JA, **Magee C**, Weber E, Nett TM. 2019. Hypothalamic Concentrations of Kisspeptin and Gonadotropin-Releasing Hormone during the Breeding Season and Non-Breeding season in Ewes. *American Journal of Reproductive Immunology* 82:e13146. PMID: 31206871. 4 citations, RCR 0.13.
 15. Hall H, **Magee C**, Clapp T. 2016. 4-Step Model to Approach Case-Base Learning in the Classroom. *Journal of Adult Education* 45:24-27. 9 citations.
 16. Dang AK, Murtazina DA, **Magee C**, Navratil AM, Clay CM, Amberg GC. 2014. GnRH evokes localized subplasmalemmal calcium signaling in gonadotropes. *Mol Endocrinol* 28:2049-59. PMID: 25333516. 33 citations, RCR 0.79.
 17. **Magee C**, Bruemmer JE, Nett TM, Squires EL, Clay CM. 2018. Kisspeptide in the estrous mare: Is it an appropriate ovulation-inducing agent? *Theriogenology* 78:1987-96. PMID: 23040060. 18 citations. RCR 0.24
 18. Seachrist DD, Johnson E, **Magee C**, Clay CM, Graham JK, Veeramachaneni DN, Keri RA. 2012. Overexpression of follistatin in the mouse epididymis disrupts fluid resorption and sperm transit in testicular excurrent ducts. *Biol Reprod* 87:41. PMID: 22649074. 16 citations. RCR 0.29.
 19. **Magee C**, Foradori CD, Bruemmer JE, Arreguin-Arevalo JA, McCue PM, Handa RJ, Squires EL, Clay CM. 2009. Biological and anatomical evidence for kisspeptin regulation of the hypothalamic-pituitary-gonadal axis of estrous horse mares. *Endocrinology* 150:2813-21. PMID 19228887. 99 citations. RCR 1.75.
 20. McCue PM, **Magee C**, Gee EK. 2007. Comparison of Compounded Deslorelin and hCG for Induction of Ovulation in Mares. *J Equine Vet Science* 27:58-61. 70 citations.
 21. McCue PM, Logan NL, **Magee C**. 2007. Management of the transition period: hormone therapy. Tutorial article. *Equine Vet Educ* 19:215-221. 38 citations.
 22. McCue PM, Logan NL, **Magee C**. 2007. Management of the transition period: physiology and artificial photoperiod. Tutorial article. *Equine Vet Educ* 19:146-150. 24 citations.

Textbooks:

1. Fails AD and **Magee C**. 2025. Anatomy and Physiology of Farm Animals. 9th Edition. Wiley. 9th edition includes new learning materials and a new chapter on llamas.
2. Fails AD and **Magee C**. 2018. Anatomy and Physiology of Farm Animals. 8th Edition. Wiley. (Reviewed in JAVMA 2019)

Refereed Proceedings/Transactions (since 2021, *presenter, #advisee):

1. *Ivie K, Martin J, #Cain M, Case S, Svec P, #Foulk L, #Mango D, #Evans E, #Reavill-O'Toole E, **Magee C**. A Comparative Study of Cadaveric Canine Anatomy Learning Modalities for Novice and Intermediate Learners. Invited Talk. American Association of Veterinary Anatomists Biennial Meeting. Saskatoon, Saskatchewan, Canada. July 2025.
2. *Svec P, Case S, #Foulk L, #Mango D, #Evans E, Ivie Jr K, Martin J, **Magee C**. Advancing Veterinary Anatomy Education: Evaluation of Formaldehyde-Free Embalming Techniques for Canine Cadavers. Poster. American Association of Veterinary Anatomists Biennial Meeting. Saskatoon, Saskatchewan, Canada. July 2025.
3. **Fisher SR, Martin JF, Nigussie F, Svec PM, Fails AD, Wilhite DR, **Magee C**. Improving student spatial and anatomical understanding of the larynx using 3D printed equine larynges. Student Poster Competition. American Association of Veterinary Anatomists Biennial Meeting. Saskatoon, Saskatchewan, Canada. July 2025.
4. **Foulk L, #Mango D, Hennet M, Ferriman C, Svec P, Dillenbeck L, Grochal B, **Magee C**. Examination of the luminal distensibility of the canine esophagus at three potential points for obstruction. Student Poster Competition. American Association of Veterinary Anatomists Biennial Meeting. Saskatoon, Saskatchewan, Canada. July 2025.
5. *Grochal B, #Foulk LE, #Mango DW, Hennet ML, Ferriman CP, Svec PM, Dillenbeck LS, **Magee C**. Dog Anatomy Data Collection: Research to Fuel the Dog Equivalent of the Small Parts Cylinder. Accepted as a poster at the 2025 International Consumer Product Health and Safety Organization Annual Symposium. Orlando, Florida
6. **Magee C**, Linton A, Sagalyn J, Snook T. How a Virtual Animal Anatomy atlas benefits from accessible design and will shape the future of anatomy education in extended realities (XR). Accessing Higher Ground Accessible Media, Web and Technology 2024 Conference. Platform Presentation, Denver, Colorado.
7. *Svenson G, Arnold O, Vigil P, Nishi N, **Magee C**. The benefits of mentoring underserved high schoolers in veterinary medicine and One Health through a free, experiential college course. 2024 CVMBS Research Day. Trainee Poster.
8. *Eastman R, #Fisher S, #Lott L, Cantlon J, McCosh R, **Magee C**. Implantation and early placentation in the mare: the role of kisspeptins in trophoblast invasion. 2024 CVMBS Research Day. Student Talk.
9. **Fisher S, #Mango DW, Fails AD, #Martin JF, Wilhite DR, **Magee C**. Developing an interactive low-cost 3D printed equine larynx. Veterinary Educators Symposium of the American Association Veterinary Medical Colleges, Texas Tech University, Amarillo, TX. Poster Presentation, October 2023.
10. **Martin JF, Cahill GR, Garrett A, Linton A, **Magee C**. Self-Efficacy and Learning Resource Selection in the Post-Pandemic Self-Regulated Learner: A Mixed Method Analysis. Western Consortium Regional Teaching Academy Biennial Meeting. Scholarship Platform Session. Oregon State University, Corvallis, OR. July 2023
11. **Mango DW, Svec P, Garrett A, #Martin JF, Fails AD, Linton A, **Magee C**. Methodology for creating 3D-printed anatomical models used for anatomy education. American Association Veterinary Anatomists Biennial Meeting. Joplin, MO. Platform presentation. July 2023.
12. **Martin JF, Cahill GR, Garrett A, Linton A, **Magee C**. Will virtual reality help students learn gross anatomy? How two measures of visual-spatial ability describe the relationship between learning with three-dimensional models and assessment outcomes. American Association Veterinary Anatomists biannual meeting. Joplin, MO. Platform presentation. July 2023.
13. **Svec P, #Mango DW, Garrett A, #Martin JF, Linton A, **Magee C**. Methodology for Creating Interactive Anatomy-Guided Quizzes. American Association Veterinary Anatomists biannual meeting. Joplin, MO. Platform presentation. July 2023.
14. **Martin JF, Linton A, Garrett A, #Svec P, #Mango DW, **Magee C**. Comparing concurrent and consecutive enrollment in anatomy: a mixed method analysis. 2022 Veterinary Educators Collaborative of the American Association Veterinary Medical Colleges, Kansas State University, Manhattan, KS. Platform talk July 2022.
15. **Mango DW, Applegate T, Hall K, Becker J, Echols S, **Magee C**. Vascular perfusion models for veterinary education using canine cadavers. 2022 Veterinary Educators Collaborative of the American Association Veterinary Medical Colleges, Kansas State University, Manhattan, KS. Poster presentation.
16. #Mango DW, Johnson J, #Svec P, Garrett A, Ivie K, Echols S, ***Magee C**. Observations and initial impressions of a formaldehyde-free embalming technique for use in a canine cadaveric anatomical dissection course. 2022 Veterinary Educators Collaborative of the American Association Veterinary Medical Colleges, Kansas State University, Manhattan, KS. Poster presentation July 2022.

17. *#Martin JF, Arnold O, Linton A, Garret A, **Magee C**. How Virtual Animal Anatomy Facilitated a Successful Transition to Online Instruction and Supported Student Learning During the Coronavirus Pandemic. 2022 CVMBS Research Day. Student Poster.
18. #Martin JF, Linton A, ***Magee C**. Evaluating Learning Resources Developed as a Result of the 2020 COVID-19 100% Online Transition in the 2021 Hybrid Learning Environment. Western Consortium Regional Teaching Academy Biennial Meeting. Scholarship Platform Session. Online, July 2021.

CONTRACTS & GRANTS (---since last promotion---) ^adisciplinary, ^dinterdisciplinary, ^fservice, ^eengagement

Research Contract

^a2024-2026 "Collection of Canine Anthropometric Data and Hazard Modelling" Role: PI. \$61,608.07. *ASTM Pet Product Research Group*. Primary Objective: Detailed evaluation and measurement of proximal gastrointestinal tract anatomical spaces using radiographs and CT for dogs of different weight classes with publication of measurement data at the end of the project.

Externally-Funded Projects as PI

- ^d2020-2023 "Virtual Bovine Anatomy: Pelvic Limb" \$150,000 *USDA-NIFA Higher Education Challenge*. Primary Objectives: 1) development of a 3D VBA Pelvic Limb module for DVM education; 2) the creation of an undergraduate (UG) Applied Food Animal Anatomy curricula; 3) engagement of UG and DVM students in learning, teaching, and outreach activities.
- ^a2017-2020 "Evaluation of Kisspeptin in the Pregnant Mare" \$113,000. *Grayson Jockey Club Foundation*, Lexington, KY. Aims: 1) Quantification of kisspeptin during equine pregnancy; 2) characterization of Kiss1/Kiss1r expression at the fetal-maternal interface
- ^a2009-2010 "Kisspeptin Mediated Regulation of the Equine Hypothalamic Pituitary Gonadal Axis" \$50,499. Young Investigator Award, *American Quarter Horse Foundation*, Amarillo, TX. Aims: 1) characterization of Kiss1 expression in the equine hypothalamus; 2) determining the biological response to exogenous kisspeptide

Externally-Funded Projects as Co-PI

- ^a2022-2023 "Evaluating extracellular vesicles from equine fetally-derived mesenchymal stem cells as an endometritis therapeutic" Role: Co-PI, PI: Hollinshead. Grayson-Jockey Club Research Foundation, \$45,418.
- ^a2021-2022 "Exploring the Development of Relationships between Students and Faculty in Veterinary Medicine: A Mixed Methods Study Comparing Remote and In Person Techniques." \$3,000.00. PI: Marino T Western Consortium Regional Teaching Academy - Novel and Innovative Educational Research. *Transferred to CSU as a subcontract in 2022 to execute study*.
- ^a2021-2022 "Validation of chorionic girdle organoid cell culture as an in vitro source of equine chorionic gonadotropin" \$20,000.00, PI: Hollinshead FK The Foundation for The Horse.
- ^a2021-2026 "Reproductive Biotechnology for Sustainable Animal Production: A Multidisciplinary Graduate Fellowship Program" PI: Tesfaye D. USDA-National Needs Fellowship. (Support of PhD student, Jason Martin, 2021.)
- ^a2020-2021 "Kisspeptins as Pro-apoptotic Mediators during Equine Endometrial Cup Demise" \$5,000. PI: Gomes VCL, Co-PI: Sones JL. Theriogenology Foundation. (Support of Gomes PhD work and I served on her PhD committee)

Externally-Funded Projects as Collaborator

- ^a2023-2024 "Optimization of equine chorionic girdle organoids for bioactive eCG production." \$50,000. PI: FK Hollinshead, The Foundation for the Horse.
- ^a2020-2021 "Equine fetally-derived mesenchymal stem cells (FDMSC) and their generated extracellular vesicles (EV) as a novel treatment for equine osteoarthritis." \$20,000. Co-PIs: FK Hollinshead & L Goodrich, AAEP Foundation for the Horse.
- ^a2021-2025 "Reproductive Biotechnology for Sustainable Animal Production: A Multidisciplinary Graduate Fellowship Program" PI: Tesfaye D. USDA-National Needs Fellowship.

Internally-Funded Projects as PI/Co-PI

- ^a2024-2025 "Investigation of estradiol signaling in the generation of the preovulatory luteinizing hormone surge in sheep" Role: Co-PI, PI: McCosh \$25,000 CVMBS College Research Council, Colorado State University.
- ^a2023-2024 "Role of brainstem neurons in the generation of the preovulatory luteinizing hormone surge" Role: Co-PI, PI: McCosh \$25,000 CVMBS College Research Council, Colorado State University.
- ^a2023-2024 "Development of biosensors for determination of luteinizing hormone concentrations in vivo" Role: PI; Co-PI McCosh \$24,968 CVMBS College Research Council, Colorado State University.
- ^a2022-2023 "Determining the pituitary contribution to the delayed LH surge in obese ewes" Role: PI \$23,356 CVMBS College Research Council, Colorado State University.
- ^a2020-2021 "Metabolic and Reproductive Consequences of Elevated Free Fatty Acids in Domestic Ruminants" Role: PI \$25,000 CVMBS College Research Council, Colorado State University.

Externally Submitted Grants, not funded since 2021

- ^d2024-2027 "ARTS: Integrative systematics of *Diacamma* as template for revision of taxonomically difficult ants" PI: Marek Borowiec. Role: Co-I. \$835,193.26. *National Science Foundation*. Primary Objective: Developing a VR learning and outreach tool for ants and other *Diacamma*. Submitted 2023, 2024, and 2025, with pending 2026 submission.
- ^d2025-2029 "Developing an integrated curriculum for engagement and career exploration in food, agriculture, and One Health" Role: PI. \$750,000 *USDA-NIFA Educational Workforce Development*. Primary Objectives: 1) integration and support of Veterinary Perspectives and Agricultural Sciences Alliance Summer Institutes; 2) creation of AgSci101, 1 credit course. "Medium priority" score in 2024, program priorities changed in 2025.
- ^d2024-2025 "Developing novel learning tools in veterinary education" PI: Shari Lanning. Role: Collaborator. \$3,000. *Academy of Veterinary Educators*. Primary Objective: Development of a novel palpation tool for feline physical examination.
- ^d2024-2028 "IUSE Engaged Student Learning: Leveraging principles of ungrading to broaden student participation and shift approach to learning in undergraduate pharmacology education" PI: Sami Case. Role: Key Person & Mentor. \$381,335.77. *National Science Foundation*. Primary Objective: Integrating ungrading to online and residential undergraduate pharmacology instruction.
- ^a2021-2022 "Validation of Equine Endometrial Organoids as a Three-Dimensional In Vitro Culture Model for the Study of Equine Endometritis" Role: Co-PI, PI: Hollinshead, FK. Morris Animal Foundation. 10,800.00. Primary Aim is to demonstrate the fidelity of the organoid as a model system for equine endometritis.
- ^a2021-2022 "Investigation of In Vitro Production of Equine Chorionic Gonadotropin Using an Organoid Culture System" Role: Co-PI, PI: Hollinshead, FK. American Quarter Horse Association, \$19,650. Young Investigator Award for Riley Thompson.
- ^a2021-2022 "Convergent Mechanisms Underlying Reprometabolic Syndrome in Women and Sheep" Role: Co-PI, PIs: Clay C & Santoro N. Colorado Clinical and Translational Sciences Institute Co-Pilot grant. \$45,600.00. Primary Aim is to demonstrate the fidelity of the obese sheep model for human reprometabolic syndrome.
- ^a2021-2022 "Organoids as Novel 3D Model for Endometritis" Role: Co-PI, PI: Hollinshead, FK. Grayson-Jockey Club Research Foundation. 42,302.80. Primary Aim is to demonstrate the fidelity of the organoid as a model system for equine endometritis.

PAPERS PRESENTED/SYMPOSIA/*INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS (--since last promotion--)

- *2025 North American Veterinary Community (NAVC) HiVE VetED, invited education expert/panelist. Event cancelled.
- *2024 "Exploring Career Opportunities in VetMed and One Health" Invited Faculty for the TAPS: Tomorrows Agricultural Professional Symposium for high school students in Alabama. Accompanied by a limited license of VAA-VR by Tuskegee University for outreach and engagement.
- *2024 "Teaching with Virtual Reality in VetMed" Invited Faculty to Tuskegee University (Tuskegee, AL) for workshop with Executive Leadership and Faculty from Agriculture and Forestry University, Nepal. Resulted in \$750/y VAA subscription.
- *2024 "Teaching with AI in VetMed and other STEM Disciplines" Invited Faculty Expert. University of California, Davis <https://wheel.ucdavis.edu/blog/upcoming-faculty-forum-teaching-ai-vetmed-stem>
- 2022 "Virtual Animal Anatomy VR in Veterinary Anatomy Education" – VR demo at the Veterinary Educators Collaborative of the American Association Veterinary Medical Colleges, Kansas State University, Manhattan, KS.
- *2022 "Virtual Reality in Veterinary Education." Online Symposium between CSU and Hokkaido University.
- 2021 "How High School Students with Limited Access to Mentoring in Veterinary Medicine Received College Credit and Experiential Learning: Veterinary Perspectives Virtual Institute" CSU Diversity Symposium. Fort Collins, CO. <https://www.youtube.com/watch?v=ppkCZJdpoWc> – also accepted as a 2022 CSU TILT PDI Jan 12, 2022.
- *2021 "Evidence-based strategies for scaffolding anatomy learning." Louisiana State University School of Veterinary Medicine Seminar Series, Virtual Presentation.
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- *2020 "Using Virtual Animal Anatomy to bridge the COVID-19 gap in cadaveric access and laboratory learning." [World Association Veterinary Anatomists 1st Online Meeting](#). Meeting abstract received highest score, resulting in the only abstract invited for platform presentation. Co-authors were the Spring 2020 VVET and Animal Anatomy teaching team: A Linton, A Garrett, K Juarez, and D Mango. Abstracts published in *Anatomia*, *Histologia*, *Embryologia*.
- *2020 "Development of 3D VR assets and Evaluation of VR in DVM teaching." Invited talk and VR demonstration at the UC Davis School of Veterinary Medicine. Davis, CA.
- *July 2019. "Virtual Animal Anatomy in DVM Education." E-Health Summer University. Invited talk and VR demonstration. Castres, France.
- *April 2019. "Anatomical Education using Case Based Inquiry and Virtual Reality." Veterinary Medical Association Executives (VMAE) ThinkWorks Conference. Invited talk & VAA VR demonstrations. San Francisco, CA

April 2019. "Virtual Animal Anatomy – VR Education." Veterinary Innovation Summit. Selected start-up for VR demonstrations. College Station, TX

2018. "Virtual Animal Anatomy: From Research to Market." Presenter at Department of Biomedical Sciences Annual Retreat. Colorado State University, Estes Park, CO

*2018. "Virtual Animal Anatomy - Japanese Translation." Invited talk at University of Hokkaido Veterinary School. Sapporo, Japan

*2017. "Scaffolding Learning in Anatomy: The Pelvic Limb." Invited Talk at Tufts University Cummings School of Veterinary Medicine, Grafton, MA

*2017. "Virtual Animal Anatomy: User Experiences and Future Directions." Invited Talks at Daktari Animal Hospital, Tokyo and University of Hokkaido Veterinary School. Sapporo, Japan

2017. "Virtual Animal Anatomy: User Experiences and Future Directions." Special Seminar, Department of Biomedical Sciences, Fort Collins, CO

2015. "Assessing Course Quality." Presenter with D. Johnson and S. Burns at TILT Professional Development Institute. Colorado State University, Fort Collins, CO

COLLABORATIVE, INTERCOLLEGIATE & INTERDISCIPLINARY SCHOLARSHIP

Virtual Veterinary Education Tools (VJET) – 2012-present, Program Lead as of 2018

Virtual Animal Anatomy (VAA) is a suite of virtual anatomy (canine, feline, equine, bovine) software programs produced by the Virtual Veterinary Education Tools (VJET) group within the College of Veterinary Medicine and Biomedical Sciences. I develop all strategies for creation and distribution of anatomical content through VJET to ensure support of teaching, outreach and engagement efforts. I ensure that we are compliant with CSU policies as well as accessibility (ADA/WCAG), privacy (FERPA) and security regulations. I foster collaborations, monitor external communications, determine product pricing, provide customer service, conduct customer discovery, provide user training, and supervise the VJET team. This work is completed with the assistance of 1 full-time developer (Linton), and through 2024 with 1 part-time project manager (Garrett), 2-6 student employees at any time working full-time during summer months and 10-20 hours work/week during the school year. Prior to 2021, funding for VJET came from the DVM program (VTA \$25,000/year) and total faculty/staff BMS subsidized input to VAA program development was approximately \$250,000/year. In 2021-22, all of the DVM support for VTAs and some of the salary support of Garret and Linton was shifted to program income and support from CSU Spur.

My specific accomplishments as Program Lead (2018-present) include:

- Completion of the **CSUVentures Research to Market** program to improve my understanding of VAA's value proposition, target market, and market potential. Resulted in **Invention Disclosure (INV18-084)** for the Adobe Flash version of the program and was used to generate more than \$25,000 in individual program sales 2018-2020.
- **VAA-LTI Academic Subscription** – In 2018, I initiated development of this HTML5 coded version of the software program to facilitate a subscription model of Software as a Service (SaaS) to other universities using a secure learning management system and a Learning Tool Interoperability (LTI) standard (<https://bms-colostate.nbsstore.net/vaa>). Launched initially for CSU students in 2019, from March-July 2020 during the COVID pandemic the VAA-LTI was provided for free to 148 schools (>12,000 users) around the world. Post-July 2020, our peak use was 74 different schools (2,782 users), and current average use is 64 schools (4,400 users) per year at a cost of \$8-15/user/year depending on the size of the subscription.
- **VAA Single User** - Launched in 2020, this allows CSU TMI Continuing Education programs access to the VAA and single users access to VAA outside of an academic subscription (<https://www.csuvtce.com/virtual-animal-anatomy/>). The Individual Subscription net income through CSU's Translation Medicine Institute (TMI) has been reduced considerably as they have changed LMS platforms (FY22) and delivery strategies. Being explored in 2026 is a VJET maintained individual mechanism using self-hosted sites and PayPal payment mechanisms.
- **WCAG 2.0 Compliance and LTI upgrades-** From 2020 to 2025, led a major accessibility initiative to bring VAA into compliance with WCAG 2.1 Level AA, in accordance with Colorado and federal ADA standards. We contracted with Perkins Access (cost \$18,000) for independent evaluation and remediation; a revised VPAT issued in June 2025 confirms full support for all applicable criteria, with three areas partially supported due to platform-specific constraints. Additionally, in 2024, the LTI software was updated to support version 1.3, accommodating institutions that require it, while maintaining compatibility with LTI 1.2 for those still using the earlier standard.

CONTRACTS

Virtual Animal Anatomy (HTML5-LTI) Software as a Subscription (SaaS)

Academic Subscription Income VAA LTI 1.2 \$366,333 since FY22

FY19-FY21 \$98,620.50 (SaaS launch and COVID-19 pandemic)
 FY22 \$67,398.00
 FY23 \$42,108.00
 FY24 \$44,485.00

FY25 \$58,976.50

FY26 \$54,745.00

Individual Subscription Gross/Net through CSU TMI (\$71,865.00/ \$50,809.98 since FY21)

FY21 \$13,300/ \$11,571.00

FY22 \$16,090/ \$9,333.30

FY23 \$10,885/ \$9,469.95

FY24 \$7,060/ \$6,142.20

FY25 \$10,965/ \$7,511.03

FY26 to date: \$13,565/ \$6,782.50

Virtual Animal Anatomy (3D VR Software) - Limited Purpose Software License (---since last promotion---):

2024 SyGlass – Provided advisory input and facilitated access to bovine CT/MRI image sets for exploratory use in SyGlass's virtual anatomy materials

2024 Tuskegee University – Collaboration to deploy VAA-VR on site with veterinary school contract for VAA with Agriculture and Forestry University, Rampur, Chitwan, Nepal (USAID funded through 2025)

---since last promotion---

2019 Mars, Incorporated. Mars Petcare (Future of Technology, Pet Health and Innovation)

2019 International Network for Humane Education (InterNICHE). Program promotion and distribution of humane alternatives in education <http://www.interniche.org/cs/node/5941>

My specific contributions to VAA development include production of the following:

- **3D model production**
 - *hemisected canine skull (2021)*
 - *interactive equine larynx (2023-25)*
 - *comparative canine tarsus (2024)*
- **Virtual Animal Anatomy - Virtual Reality**
 - <https://youtu.be/II0si-jkbjE>
 - *Interactive modules for CSU Spur and BMS531 (2021)*
- **Virtual Canine Anatomy**
 - *Japanese (2021) and Spanish (2020) translations*
 - *Dissection videos (2019)*
- **Virtual Equine Anatomy**
 - *thorax, abdomen, pelvis dissection (pending VAA integration, 2020)*
 - *head dissection, skull osteology (integrated into VAA, 2014)*
 - *pelvic limb osteology, dissection (annotated and integrated into VAA, 2012-2015)*
 - *thoracic limb osteology, dissection (annotated and integrated into VAA, 2012-2015)*
 - *Spanish translation (2024)*
- **Virtual Bovine Anatomy**
 - *lameness videos (2024)*
 - *thorax, abdomen, pelvis dissection (pending VAA integration, 2020)*
 - *claw zone anatomy (2018), claw zones module integrated into VAA (2024)*
 - *pelvic limb osteology (2013-2014), dissection (2021), and dissection annotation (2023)*
 - *thoracic limb osteology and annotation (2013-2015)*
- **Virtual Feline Anatomy**
 - *thoracic limb osteology (2013-2014), dissection (2016-2017) and annotation (2020)*
 - *skull and mandible osteology and annotation (2013-2016)*
 - *pelvic limb dissection, osteology, and annotation (2013-2015)*
 - *vertebrae osteology and annotation (2013-2015)*
- **VAA Enhancements**
 - *Neurological Examination program integrated into VAA (2024)*
 - *Introduced first Interactive 3D Models (highlightable and rotatable, 2024)*

Collaborations & Engagement (---since last promotion---):

- 2024, **Tuskegee University** and **Agriculture and Forestry University of Nepal** (Rampur, Chitwan). Support of DVM Teaching. Spring 2025 visit and program support from USAID terminated February 2025.

---since last promotion---

- 2020, **UCDavis School of Veterinary Medicine**, Development of 3D VR assets and evaluation of VR in DVM teaching, invited talk at UCDavis January 2020

- 2020, Marco A. Pereira-Sampaio DVM, MS, PhD, Professor, Department of Morphology, **Fluminense Federal University (Brazil)**, President of the World Association of Veterinary Anatomists. Collaboration as of August 2020 for Portuguese translation of VAA. Work is ongoing
- 2019, William Pérez, PhD, Professor of Anatomy at **Universidad de la República de Uruguay** and former President of the World Association of Veterinary Anatomists. Translation of the VCA to Spanish (launched August 2020) with ongoing VEA Spanish translation.
- 2017, Faculty at the **University of Hokkaido in Japan**. The translation to Japanese completed in 2021

Continuing Education and Professional Development since 2021 (Approx. No. of Hours)

2025	CVMA Annual Conference for Veterinarians (16h)
2024	CSU Annual Conference for Veterinarians (16h) USDA APHIS Category II Renewal (6 modules) CSU Assessment Leadership Academy (6h) CSU CVMBS Best Practices in Teaching Workshop (6h)
2023	AAVMC Leadership Academy, CSU representative nominated by CVMBS leadership for 1 year program (60h) CSU Annual Conference for Veterinarians (16h) SafeZone Training (2.5h)
2022	Veterinary Educators Collaborative of the American Association of Veterinary Medical Colleges (6h) Colorado Veterinary Medical Association (12) CSU Annual Conference for Veterinarians (16h) CSU Alliance Diversity and Mentorship training (2h) American Red Cross CPR Training (4)
2021	CSU Alliance Diversity and Mentorship training (2h) CSU Annual Conference for Veterinarians (16h) CSU Diversity Symposium (8h) Western Consortium Regional Teaching Academy annual meeting (6h) Society for Theriogenology Meeting, online (16h) USDA APHIS Category II Renewal (6 modules)

CV SECTION 3: EVIDENCE OF TEACHING AND ADVISING EFFECTIVENESS

TEACHING:

Courses as Course Director: *Most of these courses are taught as a team, but I am responsible for all programmatic and curricular development, content, delivery, and assessment. I provide a great deal of mentoring, advising, and individualized support to my students.*

VM795 Large Animal Anatomy Independent Study, 1 cr, Spring 2016- present (12-35 students)

BMS305 Domestic Animal Gross Anatomy (Honors), 4 cr, Spring 2012- present, Avg. 120 students

BMS496D Honors Breakout Session BMS305, 1 cr, Spring 2013- present, Avg. 15 students

BMS 531 Domestic Animal Dissection, 3 cr, Spring 2012- present, Avg. 30 students

BMS 633 Domestic Animal Anatomy – Case Discussions, 2 cr, Spring 2012- present, Avg 20 students

BMS 384 Supervised College Teaching, 1-3 cr, Spring 2012- present, Avg. 25 students

BMS 684 Supervised College Teaching, 1-3 cr, Spring 2012-present, Avg. 5 students

BMS495 or 695F Independent Study, 1-2 cr, 2012- present, Avg. 12 students/yr

BMS304 (previously 380A) Applied Food and Fiber Animal Anatomy Course, 3 cr, Fall 2021-2024, Avg 20-40 students

VMBS101 Alliance Institute Veterinary Perspectives, 1 cr online course, Summer 2020-2024, 20-40 students

VM618 Professional Veterinary Medicine – Histology and Physiology, 7 cr, Fall 2016-2023. Avg. 138 students

Courses as Lecturer or Course Support (since 2020):

DVM Theriogenology, Fall 2023, Invited teaching locum Louisiana State University, 4 h of anatomy and physiology review

VMBS100 Introduction to Biomedical Sciences

Fall 2023, faculty roundtable and case presentation (2h)

Fall 2024-5, faculty roundtable, New One Health intro, and case presentation (3h)

BMS430 Endocrinology, 4 cr, Avg 60 students

Fall 2024-5, New Reproductive Endocrinology lectures (15h)

VM618 Professional Veterinary Medicine – Histology and Physiology, 7 cr, Avg. 138 students

Fall 2024, course support for Dr. Case as new coordinator, Endocrinology (6h) and Acid Base (3h)

VM616 Professional Veterinary Medicine – Functional Anatomy, 9 cr, Avg. 138 students,

Fall 2023-25, recitations (3h)

Fall 2022, floor anatomist, lab coordination, and course support as needed and 3 recitations (40 hours to date)

Fall 2021, floor anatomist and course support as needed (15 hours)

Fall 2020, floor anatomist (8h/week) section B (70 students) for the entire semester (128h)

ADVISING:

SUMMARY:

Current Graduate Committee Memberships (excluding those chaired):

	# Plan C
60	# Plan B
	# Plan A
1	# MS/MA (no plan)
1	# PhD
4	# DVM

Graduate Committee Memberships (for past 5 years, not including those above)

	# Plan C
92	# Plan B
	# Plan A
2	# MS/MA (no plan)
1	# PhD
3	#DVM

UNDERGRADUATE STUDENTS (14 shown of 34 total since 2012):

*Undergraduate Senior Honors Thesis (*primary advisor, *indicates matriculation to DVM program)*

- Aidan Halasy^a, ongoing, "Business Models in Vet Med and their Relationship to Mental Health"
- Eva Salm^a, ongoing, "Canine Brachial Plexus Teaching Model"
- Elly Newman^a, ongoing, "Canine Larynx Teaching Model"
- Nicholas Williams^a, ongoing, "Equine Distal Limb Support Teaching Model"
- Riley Carpenter^a, 2025, "Animal Cadaver Use and Its Role in Educational Settings"
- Daniela Foarde^a, 2024, "Studying the Mental Health Decline of Veterinary Professionals"
- Sophie Foster^a, 2024, "Common Calcaneal Tendon Disruption in Dogs and Cats and the Associated Anatomy"
- Megha Gaonkar^a, 2024, "Canine skeletal articulation and analysis of osteosarcoma in relation to anatomy end function"
- Madalyn Guertin, 2024, "Finding the Purrfect Solution: An Evaluation of Sterilization Methods in Cats"
- Kaitlyn Almquist^a, 2023, "Equine Bone and Muscle Coordination Animation"
- Meagan Eickelbeck*, 2023, "Review of the Current Gaps Veterinary Students Face Concerning the Underdeveloped Virtual Equine Anatomy Programs"
- Clarisse Nadeau^a, Fall 2022, "Horses through the Ages"
- Aleyse Evers^{a*}, Fall 2022, "Articulation of Canine Skeleton and Analysis of Hip Dysplasia as it is Connected to Anatomy and Mechanics of Coxofemoral Joint in Canines."
- Alexis Ehrlich*, Fall 2022, "Colon 3D model for GI study"
- Delany Lord, 2022, "Understanding Equine Recurrent Airway Obstruction, its Treatment, and its Management," committee member and support for new Clinical Sciences faculty Dr. Anna Bracken.
- Daniela Leopardi^{a*}, Spring 2022, "Cadaver Usage as an Effective Learning Tool."
- John Powell^{a*}, Spring 2022, "A Study on the Mental Health Crisis in the Field of Veterinary Medicine", Thesis improvement grant (\$400, 2021), **manuscript in preparation.**
- Julia Love^a, Spring 2022, "Domestic animal models for wild felid reproduction - understanding fertility regulation in felid animal models and wild cat populations"
- Lexxee Wilson^a, Fall 2020-2021 "Building teaching models for equine biomechanics"

GRADUATE/PROFESSIONAL STUDENTS (since 2020):

Ryan Eastman, PhD Committee 2025-2026. Changed programs/departments spring 2026.

Jason Frederick Martin, PhD 2023. Dr. Martin's PhD was focused on strategies for successful learning outcomes following integration of virtual reality anatomical teaching tools in veterinary education. Post-doc completed at Utah State University College of Veterinary Medicine, hired as an Assistant Professor in BMS at CSU January 2025m

Department of Biomedical Sciences Master of Science (1 year, MS-B) program, 16-20 students, 2012-present

Academic Advisor for animal anatomy concentration students. This includes MS-B program admissions, student support, mentorship, and grading of annual Comprehensive Exams in animal anatomy. I also have 2-3 GTAs per year to assist with teaching animal anatomy. Most students are applying to veterinary school and hoping to demonstrate academic capacity to DVM admissions panels, though some find other passions including teaching.

Viviane C Leite Gomes. PhD student in Clinical Sciences at Louisiana State University, Advisor, Jenny Sones. 2019-2022.

FACULTY MENTORING:

2023-present Sami Case, PhD, Assistant Professor (non-tenure track), Department of Biomedical Sciences, CSU
2021-present Carolyn Meyer, PhD, Assistant Professor (non-tenure track), Department of Biomedical Sciences, CSU
2019-present Kimberley Jeckel, PhD, Assistant Professor (non-tenure track), Department of Biomedical Sciences, CSU
2019-present Olivia Arnold, PhD, Graduate Coordinator and Instructor (2019-2024), Assistant Professor (2025-present),
Department of Environmental and Radiological Health Sciences, CSU

LETTERS OF RECOMMENDATION (since 2012):

- * 41 total letters in 2024, 44 in 2025, 37 to date for 2026
- DVM program applicants (VMCAS +/- supplemental packets), ~25 annually
- DVM or other students seeking externship or research opportunities, ~15 annually

CV SECTION 4: EVIDENCE OF OUTREACH/SERVICE/ENGAGEMENT (2020-current)

COMMITTEES

Colorado State University

2023-present Multicultural Staff and Faculty Council

2024-2025 Institute for Entrepreneurship (I4E)

2022-2023 Provosts Council for Engagement

2022 Animal Sciences Department Equine Reproductive Physiologist, Search Committee Member, search completed.
Carleigh Fedorka, PhD hired.

2019-2021 CVMBBS Representative to CSU's Faculty Council

College of Veterinary Medicine and Biomedical Sciences

2026-present CVMBBS Workforce Planning Strategic Initiative

2024-present CVMBBS Biomedical Curriculum Committee

2024-2025 CVMBBS Director of Communications, Search Committee member

2023-23 DVM Professional and Scholastic Standards and Professionalism Committee

2021 Clinical Sciences Department Equine Ambulatory Clinician, Search Committee Member, first search failed, second search resulted in the hire of Dr. Anna Bracken (a former MSB student and anatomy GTA)

Spur-Vida-Content Creation and Review – In addition to creating storylines for veterinary cases, the VVET team has created anatomical models, videos, and other content to support outreach at Vida.

2019- present DVM Curriculum Renewal – My role 2019-2023 was to provide basic sciences (anatomy, physiology) and BMS input as a member of the DVM Curriculum Renewal Committee. In 2021-22 I provided leadership in the development of the Endocrinology, Reproduction, and Biomedical Building Blocks (BBB) sections. In 2023, my duties in BMS increased, but I remain a contributor to BBB and Veterinary Education Center development, particularly for anatomy program development and delivery.

Department of Biomedical Sciences

2023-present Associate Department Head, BMS

BMS Undergraduate Education Committee, Chair

BMS Curriculum Committee, Ex officio

Supervise 3 Undergraduate BMS Advisors, Search Chair/hire of Deb Misuraca in 2024

BMS Teaching Focused Retreats/Workshops: 2 in 2024, 1 2025, 1 2026

2022 Non-Tenure Track Faculty Assistant-Associate Professor of Anatomy and Physiology, Search Chair (2 positions) – committee charged August 2022, Sami Case & Julie Becker hired, January 2023.

Animal Anatomy Laboratory Coordinator, Hiring Authority, hired Paulina Svec January 2023.

Director of Animal Anatomy Programming and Strategic Planning (since 2019). Supervise 3 staff and 2-5 student anatomy embalming technicians.

DVM & Clinical Services Committee, Chair since 2017. I collect and provide input to DVM budget requests and program planning to ensure DVM and Clinical Services needs are met by BMS.

Research and Facilities Committee, Member since 2015

Graduate Education Committee, Member since 2013. MS-B Steering and Admissions Sub-Committees – 2013-ongoing; PhD Education Curriculum Task Force, 2020-ongoing.

2020 CVMBBS Assistant Dean for Outreach, Search Chair, (Hired Wade Ingle)

CSU/CU MD program Educational Specialist, Search Committee Member, (Hired Ellen Aster)

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

2020-present American Association of Veterinary Anatomists (President-Elect 2023, President 2025-present)

2019-present Teaching Academy Fellow, Consortium of West Region Colleges of Veterinary Medicine, member of Faculty Development and External Peer Review of Teaching Working Groups

2016-present Colorado State University Center for the Analytics of Learning and Teaching, PI for 3D Visualization in Domestic Gross Anatomy.
2007-present American College of Theriogenologists
2006-present Society for Theriogenology
Licensed to practice veterinary medicine with USDA certification* in Colorado*, Massachusetts*, and New Hampshire
DEA license (RM0586670, Schedule 2 2N 3 3N 4 5) Renewed December 2025

Scientific Journal Reviewer (since 2019)

Review Editor, Editorial Board (since 2023) of Comparative and Clinical Medicine, specialty section of Frontiers in Public Health, Frontiers in Medicine and Frontiers in Veterinary Science, (3 in 2024, 1 in 2023)
Journal of Visual Communication in Medicine (1 in 2025)
Equine Veterinary Education (1 2025)
Anatomical Sciences Education (1 in 2020, 1 in 2022, 2 in 2023, 2 in 2025)
Journal of Neuroendocrinology (1 in 2021)
American Journal of Physiology-Regulatory, Integrative and Comparative Physiology (1 in 2020, 1 in 2021)
Clinical Theriogenology (1 in 2020)
Domestic Animal Endocrinology (1 in 2020)
Anatomia, Histologia, Embryologia (2 in 2020, 1 in 2022)
Biology of Reproduction (1 in 2019)

OUTSIDE REVIEWER FOR PROMOTION AND TENURE

Western Regional Teaching Academy – External Peer Review of Teaching (EPRT)
2026 - Committee Chair for EPRT Letter for 1 WICHE veterinary college faculty
2025 - Committee Member for EPRT Letter for 1 WICHE veterinary college faculty
Individual Reviews
2023 - 1 faculty from a land grant university
2021 - 2 faculty from WICHE veterinary colleges

OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH (since 2020)

Undergraduate Recruitment, College of Veterinary Medicine and Biomedical Sciences, CSU. We provide a significant amount of outreach within the college and an effort began in 2025 to ensure that we do not provide redundant experiences to K-12 students as part of our outreach/recruitment opportunities. In Fall 2025, I collaborated with other CVMBS undergraduate program leaders to create distinct experiences for students “choosing” CSU and those who are already admitted to our program. I led the development of a One Health case-study representative of the faculty expertise and potential student experience in CVMBS that was delivered by our undergraduate program leaders at two spring 2026 **Choose CSU** recruitment events to high school seniors, and another new, distinct experience was delivered at an admitted students event spring 2026. **Enrollment in our BMS undergraduate program continues to rise (190 incoming freshman fall 2026** compared to 104 fall 2024 and 135 fall 2025) despite what should be an academic enrollment cliff; hopefully in part to our demonstrated commitment to our students and their education at recruitment events such as these.

Teaching Retreats/Workshops, Department of Biomedical Sciences, CSU.

Since becoming the Associate Department Head in the fall of 2023, I have worked to create a cohesive message to our faculty and to our students about our teaching efforts and priorities. I have organized and hosted two Teaching Retreats (May 25, 2024; August 14, 2024) and one Teaching Workshop (August 19, 2025) for the faculty within BMS to grow skills and transparency around teaching efforts, and one Undergraduate Curriculum Workshop (May 27, 2026) to review the value proposition and direction of the undergraduate major with BMS faculty.

Student Appreciation Days, College of Veterinary Medicine and Biomedical Sciences, CSU. I initiated a “BMS Student Appreciation Days” spring 2025 as three days (M.Tu.W 10a-1p) for more than 300 students to venture into the BMS office for a snacks, stickers, a chance to win a wireless speaker, and interact with faculty and staff who appreciate that they chose CSU. In 2026, I expanded it to a “CVMBS Student Appreciation Days” in collaboration with other CVMBS undergraduate programs and advisors and to promote the reorganization of the Undergraduate Computer Lab as a student space for learning, collaboration, and lunch with the addition of a microwave.

Animal Anatomy Outreach, Department of Biomedical Sciences, CSU

In collaboration with the Human Anatomy team in BMS, the animal anatomy team provides outreach and engagement opportunities to more than 500 K-12 students visiting CSU each year. As Director of Animal Anatomy Programming, I have supervisory role (Andrew Garrett 2019-2024, Mykee Cain 2024-2025, Grace Nickerson 2025-2026) for these activities, with a direct role in ensuring BMS anatomy policy adherence, developing content, recruiting volunteers, and collaborating with other units to provide a unified CVMBS/One Health experience.

Program Director, Zoetis Veterinary Perspectives Institute, College of Veterinary Medicine and Biomedical Sciences, CSU.
Initially planned as a residential program for summer 2020, this was put on hold as result of COVID-19. This summer program is in partnership with the Alliance Center at CSU to develop an opportunity for students from diverse backgrounds and under-resourced high schools, to learn about careers in veterinary medicine. Funded by Zoetis, Inc. (\$50,000 2020) the program is intended to host approximately 40 students for 6 nights, 7 days in the CSU residence halls, including students from Western Region DVM Consortium states (i.e. California, Nevada, Oregon, etc.). Participating high school students are paired with an Alliance Summer Institute alumnus as a primary counselor, as well as near-peer mentors from the CSU UG/G/DVM programs. Students interact with real anatomical specimens, use case studies to understand applied anatomy and One Health, and study comparative anatomy using virtual anatomy. The Veterinary Perspectives Institute also gives CSU students the opportunity to provide community service and gain leadership experience by teaching in the curriculum and mentoring participating students. For 2021, I re-designed this as a virtual program so that approximately 40 students from high schools in the Western Consortium could explore an “outbreak” and interact with faculty experts to solve the outbreak. Students met from 9-12 daily for 5 days to develop skills to solve this novel problem as well as explore major themes including 1) exploration of the veterinary profession, 2) pathways to veterinary medicine; 2) topics in veterinary medicine including debt awareness and repayment programs, wellness, leadership and communication skills. Participants received 1 academic credit for their efforts through CSUOnline with UCC approval in a new course that I created (VMBS101). I secured additional funding in 2021 (\$30,000) and 2022 (\$50,000) from Zoetis for a residential version of program summer 2022-23. The previously designed 2020 program was merged with the virtual curriculum from 2021, to deliver an exceptional academic program in 2022 for 40 student participants and 15 peer mentors. The program was delivered in 2023 with 17 participants with a manuscript submitted to Journal of Youth Development with the program outcomes. A final gift of \$75,000 supported 20 students each year for 2024 and 2025. **The total Zoetis gift was \$255,000** with ongoing efforts to obtain federal funding and expand the summer program to Tuskegee University and University of Florida.

Suture Clinic, Department of Biomedical Sciences, CSU

2021-25: Led a 2 hour Suture Clinic for 20 MS students using the Canvas teaching module. Assisted by 2-3 other PA/MD/DVMs, have also coordinated suture clinics for undergraduate students using the same platform.

Middle School Student Council Faculty Advisor, Saint Joseph’s Catholic School, Fort Collins, CO

2024-2025: Thursday lunch and other activities to support leadership development

DVM Tutoring Program, CVMBS, CSU

2018-2024. In 2018 I worked with Dr. Andrew West, then Director of the CVMBS Academy for Teaching and Learning/now CVMBS Associate Dean for Teaching and Learning, to revamp the DVM Tutoring a new Canvas based Group Tutoring support site for each of the major DVM year 1 and 2 courses. I supervise 2 program coordinators, a DVM Program Teaching Assistant (DPTA) for each of the major courses (5-8/semester), and the 2-3 Student Assistant Study Session (SASS) Coordinators per course (7-15/semester) who facilitate each of the weekly group study hall sessions. 2023 marks the program’s 6th year, with student surveys and course performance evaluation demonstrating this program as a positive draw for students to select CSU’s DVM program as well as a continued reduction in dependence on 1:1 tutoring and improved student outcomes. Leadership transitioned to Dr. Sami Case in 2024.

Gardens on Spring Creek, Fort Collins

2024: Garden cleanup coordinator and volunteer for student service learning and community engagement activity.

Pre-Veterinary Club, College of Veterinary Medicine and Biomedical Sciences, CSU

2022: Invited talk “So you want to be a veterinarian?” at PreVet Club Monthly meeting

Predator vs. Prey – How can you tell?

2021 – Grades 5-8, Saint Joseph’s Catholic School, Fort Collins, CO, in-class outreach for > 80 students with both anatomy specimens as well as 20 VR Oculus Quest 2 headsets using VAA-VR with CVMBS Outreach staff as a trial for SPUR Vida

Appendix 1: Materials prepared for my 2020 Promotion and Tenure External Review of Teaching as instructed by the Western Consortium Regional Teaching Academy’s guidelines for external peer review. This document is accessible from a Google Drive using this [link](#). The intention of providing this document is to catalogue breadth and depth of my teaching impact prior to 2020.

Appendix 2: For a visual and detailed record of my achievements, including video production and website development to support teaching, outreach, and service, please visit www.christiannemagee.com