

HAYLEY C. LANIER—Curriculum Vitae

Assistant Curator of Mammalogy
Sam Noble Museum
University of Oklahoma
tel: 405-310-7281

Assistant Professor
Department of Biology
University of Oklahoma
hclanier@ou.edu

EDUCATION

University of Michigan, Ann Arbor, MI (2010–2013)
Postdoctoral Research Fellow. Museum of Zoology and Department of Ecology and Evolutionary Biology

University of Alaska Fairbanks, Fairbanks, AK (2004–2010)
Ph.D. in Biological Sciences. Department of Biology & Wildlife

University of Kansas, Lawrence, KS (1999–2004)
B.S., Ecology and Evolutionary Biology. Departmental and University Honors

RESEARCH & PROFESSIONAL EXPERIENCE

- Journal Publications (peer reviewed)** [^{UG}undergraduate or ^Ggraduate student co-author]
- Theriot, MK, LE Olson, **HC Lanier**. Accounting for age: Uncovering the nuanced drivers of mammal body-size responses to global change. *Journal of Mammalogy* [in press]
- Markova, S, **HC Lanier**, MA Escalante, MdOR da Cruz^G, M Horníková, LJ Weider, JB Searle, P Kotlík. Local adaptation and future climate vulnerability in a wild rodent. *Nature Communications* 14:7840. <https://doi.org/10.1038/s41467-023-43383-z>
- Marske, KM⁺, **HC Lanier**⁺, CD Siler, AH Rowe, LR Stein. 2023. Integrating biogeography and behavioral ecology to rapidly address biodiversity loss. *PNAS* 120(15): e2110866120. <https://doi.org/10.1073/pnas.2110866120> [=Authors contributed equally]
- Flaherty, EA, **HC Lanier**, J Varner, JM Duggan, S Beckmann, C Yahnke, LP Erb, L Patrick, L Dizney, K Munroe, PK Connors. 2023. Teaching mammalogy in the 21st century: Advances in undergraduate education. *Journal of Mammalogy* 104(4):655–666. <https://doi.org/10.1093/jmammal/gyac121>
- Yahnke, C, **HC Lanier**, EA Flaherty, K Munroe, JM Duggan, LP Erb, L Dizney, PK Connors, J Varner. 2023. What should our students be able to do? Embedding professional skills and competencies into mammalogy courses. *Journal of Mammalogy* 104(4):696–706. <https://doi.org/10.1093/jmammal/gyad035>
- Theriot, MK^G, **HC Lanier**, LE Olson. 2023. Harnessing natural history collections to detect body-size change as a response to warming: a critique and review of best practices. *Methods in Ecology and Evolution* 14:306–318. <https://doi.org/10.1111/2041-210X.13861> [Recipient of the Rosemary Knapp Award for Excellence – an OU Biology Award for the best graduate student paper]
- Allen, AG^G, ZP Roehrs, RS Seville, and **HC Lanier**. 2022. Competitive release during fire succession influences ecological turnover in a small mammal community. *Ecology* 103:e3733. <https://doi.org/10.1002/ecy.3733>
- Sjodin BMF^G, KE Galbreath, **HC Lanier**, MA Russello. 2021. Chromosome-level reference genome assembly for the American pika (*Ochotona princeps*). *Journal of Heredity* 112(6): 549–557. <https://doi.org/10.1093/jhered/esab031>
- Connors PK⁺, **HC Lanier**⁺, LP Erb, J Varner, L Dizney, EA Flaherty, JM Duggan, CJ Yahnke, JD Hanson. 2021. Connected while distant: Networking CUREs across classrooms to create

- community and inspire students. *Integrative and Comparative Biology*.
<https://doi.org/10.1093/icb/icab146> [=Authors contributed equally]
- Horníková, M^G, S Marková, **HC Lanier**, JB Searle, P Kotlík. 2021. A dynamic history of admixture from Mediterranean and Carpathian glacial refugia drives genomic diversity in the bank vole. *Ecology and Evolution*. 11(12): 8215–8225
- Dizney, L, J Varner, JM Duggan, **HC Lanier**, PK Connors, LP Erb, EA Flaherty, C J Yahnke, JD Hanson. 2021. Squirreling from afar: adapting Squirrel-Net modules for remote teaching and learning. *CourseSource*. <https://doi.org/10.24918/cs.2021.2>
- Kothapalli, NR, M Savic, **HC Lanier**, EK Freeman, LM Ratliff^{UG}, E Hillerman^{UG}, C Martin^{UG}. 2021. Positioning humanity before progress: students' and mentors' perceptions on the COVID-19 response to undergraduate research. *Scholarship and Practice of Undergraduate Research* 5(1): 31–38
- Marková, S, M Horníková^G, **HC Lanier**, H Henttonen, JB Searle, LJ Weider, P Kotlík. 2020. Genomic signatures reveal high diversity of the bank vole in Fennoscandia: the role of multiple colonizations and end-glacial refugia. *Molecular Ecology*. 29:1730–1744
- Connors, PK, J Varner, LP Erb, L Dizney, **HC Lanier**, JD Hanson, CJ Yahnke, JM Duggan, EA Flaherty. 2020. Squirreling around for science: observing sciurid rodents to investigate animal behavior. *CourseSource*. <https://doi.org/10.24918/cs.2020.7>
- Dizney, L, PK Connors, JM Duggan, J Varner, **HC Lanier**, LP Erb, EA Flaherty, C J Yahnke, JD Hanson. 2020. An introduction to the Squirrel-Net Consortium teaching modules. *CourseSource*. <https://doi.org/10.24918/cs.2020.26>
- Duggan, JM, J Varner, **HC Lanier**, EA Flaherty, L Dizney, CJ Yahnke, PK Connors, LP Erb, JD Hanson. 2020. Squirrels in Space: Using radio telemetry to explore the space use and movement of sciurid rodents. *CourseSource*. <https://doi.org/10.24918/cs.2020.25>
- Varner, J, **HC Lanier**, JM Duggan, L Dizney, EA Flaherty, PK Connors, LP Erb, C Yahnke, JD Hanson. 2020. How many squirrels are in the shrubs? A lesson for comparing methods for population estimation. *CourseSource*. <https://doi.org/10.24918/cs.2020.6>
- Yahnke, CJ, L Dizney, J Varner, JM Duggan, **HC Lanier**, LP Erb, EA Flaherty, PK Connors, JD Hanson. 2020. Sorry to eat and run: A lesson for testing trade-offs in squirrel behavior using Giving Up Densities (GUD). *CourseSource*. <https://doi.org/10.24918/cs.2020.30>
- Smith, AB, EA Beever, AE Kessler, AN Johnson, C Ray, CW Epps, **HC Lanier**, R Klinger, TJ Rodhouse, J Varner, +59 other co-authors. 2019. Alternatives to genetic affinity as a context for within-species response to climate. *Nature Climate Change*. doi:10.1038/s41558-019-0584-8 [Note: I was one of three co-authors invited based on conceptual contributions as opposed to the contribution of occurrence data.]
- Barry, R and **HC Lanier**. 2019. *Sylvilagus obscurus*. *The IUCN Red List of Threatened Species*. e.T41301A45192437
- Litvaitis, JA and **HC Lanier**. 2019. *Sylvilagus transitionalis*. *The IUCN Red List of Threatened Species*. e.T21212A45181534
- Lorenzo, C and **HC Lanier**. 2019. *Sylvilagus cunicularius*. *The IUCN Red List of Threatened Species*. e.T21211A45181292
- Lorenzo, C and **HC Lanier**. 2019. *Sylvilagus graysoni*. *The IUCN Red List of Threatened Species*. e.T21206A45180643.
- Lorenzo, C, DE Brown, and **HC Lanier**. 2019. *Sylvilagus insonus*. *The IUCN Red List of Threatened Species*. e.T21207A45180771
- McCleery, R and **HC Lanier**. 2019. *Sylvilagus palustris*. *The IUCN Red List of Threatened Species*. e.T41303A45192995
- Nielsen, CK and **HC Lanier**. 2019. *Sylvilagus aquaticus*. *The IUCN Red List of Threatened Species*. e.T41296A45190578
- Nielsen, CK and **HC Lanier**. 2019. *Sylvilagus floridanus*. *The IUCN Red List of Threatened Species*. e.T41299A45191626

- Knowles, LL, R Massatti^G, Q He^G, LE Olson, and **HC Lanier**. 2016. Quantifying the similarity between genes and geography across Alaska's alpine small mammals. *Journal of Biogeography*. 43:1464–1476
- Lanier, HC** and D Hik. 2016. *Ochotona collaris*. *The IUCN Red List of Threatened Species* 2016: <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T41257A45182533.en>
- Lanier, HC**, R Massatti^G, Q He^G, LE Olson, and LL Knowles. 2015. Colonization from divergent ancestors: glaciation signatures on contemporary patterns of genomic variation in collared pikas. *Molecular Ecology*. 24:3688–3075
- Lanier, HC** and LL Knowles. 2015. Applying species-tree analyses to deep phylogenetic histories: Challenges and potential suggested from a survey of empirical phylogenetic studies. *Molecular Phylogenetics and Evolution*. 83:191–199
- Natarajan, C, FG Hoffmann, **HC Lanier**, ZA Cheviron, ML Spangler, RE Weber, A Fago, and JF Storz. 2015. Intraspecific polymorphism, interspecific divergence, and the origins of function-altering mutations in deer mouse hemoglobin. *Molecular Biology & Evolution* doi: 10.1093/molbev/msu403
- Lanier, HC**, AM Gunderson, M Weksler, VB Fedorov, and LE Olson. 2015. Comparative phylogeography of eastern Beringian mammals highlights the double-edged sword of climate change faced by arctic- and alpine-adapted species. *PLoS ONE* 10(3): e0118396
- Lanier, HC**, H Huang^G, and LL Knowles. 2014. How low can you go? The effects of mutation rate on the accuracy of species-tree reconstruction. *Molecular Phylogenetics and Evolution*. 70:112–119
- Lanier, HC**, DL Edwards, and LL Knowles. 2013. Phylogenetic structure of vertebrate communities across the Australian arid zone. *Journal of Biogeography* 40:1059–1070
- Lanier, HC** and LE Olson. 2013. Deep barriers, shallow divergences: reduced phylogeographic structure in the collared pika (*Ochotona collaris*). *Journal of Biogeography* 40:466-478 [profiled in *The Wildlife Professional & by the American Society of Mammalogists*]
- Reese, AT^{UG}, **HC Lanier**, and EJ Sargis. 2013. Skeletal indicators of ecological specialization in pika (Mammalia, Ochotonidae). *Journal of Morphology* 247:585–602
- Lanier, HC** and LL Knowles. 2012. Is recombination a problem for species-tree analyses? *Systematic Biology* 61:691–701
- Knowles, LL^F, **HC Lanier^F**, PB Kilmov, and Q He^G. 2012. Full modeling versus summarizing gene-tree uncertainty: method choice and species-tree accuracy. *Molecular Phylogenetics and Evolution* 65:501–509. [*Authors contributed equally]
- Gunderson, AG, **HC Lanier**, and LE Olson. 2012. Limited phylogeographic structure and genetic variation in Alaska's arctic and alpine endemic, the Alaska marmot. *Journal of Mammalogy* 93:66–75
- Roberts, TE, **HC Lanier**, EJ Sargis, and LE Olson. 2011. Molecular phylogeny of treeshrews (Mammalia: Scandentia) and the timescale of diversification in Southeast Asia. *Molecular Phylogenetics and Evolution* 60:358–372
- Matson, JO, W Bulmer, RP Eckerlin, **HC Lanier**, and N Woodman. 2010. Small mammals from a cloud forest in the Montañas de Cuilco, Huehuetenango, Guatemala. *Virginia Journal of Science* 61:57–58
- Weksler, M, **HC Lanier**, and LE Olson. 2010. Eastern Beringian biogeography: Historical and spatial genetic structure of singing voles (*Microtus miurus*) in Alaska. *Journal of Biogeography* 37:1414–1431
- Lanier, HC** and LE Olson. 2009. Inferring divergence times within pikas (genus *Ochotona*) using mtDNA and relaxed molecular dating techniques. *Molecular Phylogenetics and Evolution* 53:1–12
- Olson, LE, Z Rakotomalala, KBP Hildebrandt, **HC Lanier**, CJ Raxworthy, and SM Goodman. 2009. Phylogeography of *Microgale brevicaudata* (Tenrecidae) and description of a new species from western Madagascar. *Journal of Mammalogy* 90:1095–1100

Book Chapters (peer reviewed)

- Lanier, HC.** 2018. *Ochotona collaris*. *Lagomorphs of the World*. AT Smith, ed. Johns Hopkins University Press
- Ruadas, LA, JM Mora, and **HC Lanier.** 2018. Evolution of Lagomorpha. *Lagomorphs of the World*. AT Smith, ed. Johns Hopkins University Press

Other Publications (not peer reviewed)

- Dizney L, Duggan JM, Connors PK, **Lanier HC**, Varner J, Flaherty EA, Erb LP, Yahnke CJ. (2023). Response to Messenger et al. 2022. *Frontiers in Ecology and the Environment*. DOI:10.1002/fee.2638
- HC Lanier** and C Lorenzo. 2022. Lagomorph Specialist Group 2021 Report. IUCN: *Species Survival Commission Publication*
- HC Lanier** and C Lorenzo. 2021. Lagomorph Specialist Group 2020 Report. IUCN: *Species Survival Commission Publication*
- Hansen A, PK Connors, D Donnelly-Hermosillo, R Full, A Hove, **HC Lanier**, D Lent, J Nation, K Tucker, J Ward, E Zavaleta. 2021. Introduction to the symposium: Biology beyond the classroom: Experiential learning through authentic research, design & community engagement. *Integrative and Comparative Biology* 61(3): 926–933
- Smith, AT and **HC Lanier.** 2020. Lagomorph Specialist Group 2019 Report. IUCN: *Species Survival Commission Publication*
- Flaherty, EA, J Varner, JM Duggan, PK Connors, L Dizney, and Squirrel Net Consortium [**HC Lanier**, DJ Hanson, L Erb, CJ Yahnke]. 2019. A CURE for the common course. *The Wildlife Professional*. Nov/Dec 32–35. [editorially reviewed]
- Smith, AT and **HC Lanier.** 2019. Lagomorph Specialist Group 2018 Report. IUCN: *Species Survival Commission Publication*
- Anderson, RP, MA Eifler, **HC Lanier**, and T Holmes. 2019. Mammalian research honoring the educational contributions of Grinnell Awardee Robert M. Timm. *Journal of Mammalogy*. 100(6): 1710–1712
- Stover, SG and **HC Lanier.** 2019. Women geoscientists at State Geological Surveys – A status update. *Kansas Geological Survey*
http://www.kgs.ku.edu/Publications/OFR/2019/OFR19_20/index.html
- Lanier, HC**, LM Moore, ZP Roehrs, AL Wangeline, and RS Seville. 2017. The influence of fire interval on community structure in the Greater Yellowstone Ecosystem. *University of Wyoming National Park Service Research Center Annual Report 40th Annual Report*.
- Lanier, HC**, LL Carver^{UG}, ZP Roehrs, MA Roehrs, and RS Seville. 2015. Small mammal movements and fire history: testing the long-term effects of the 1988 Huckleberry Mountain Fire. *University of Wyoming National Park Service Research Center Annual Report 38th Annual Report*. 38(10):58–67
- Lanier, HC**, AJ Kulkowski^{UG}, ZP Roehrs, MA Roehrs, and RS Seville. 2014. Succession effects on mammal and invertebrate communities 26 years after the 1988 Huckleberry Mountain Fire. *University of Wyoming National Park Service Research Center Annual Report* 37(8):49–57

Professional Positions

- 2017–present: Sam Noble Oklahoma Museum of Natural History, University of Oklahoma, *Assistant Curator of Mammals*
- 2017–present: Department of Biology, University of Oklahoma, *Assistant Professor*
- 2016–2017, 2020–present: University of Alaska Museum, University of Alaska Fairbanks, *Research Affiliate*
- 2013–2017: Department of Zoology & Physiology, University of Wyoming, *Assistant Professor*

- 2013–2015: University of Alaska Fairbanks, *Research Associate*
2010–2013: University of Michigan Museum of Zoology, *Postdoctoral Research Fellow*
2005–2010: University of Alaska Museum, *Graduate Curatorial and Research Assistant, Mammalogy Department*
2003–2004: Western Aleutians Archeological and Paleobiological Project, University of Kansas Museum of Natural History, *Undergraduate Research Assistant*
2001–2004: University of Kansas Museum of Natural History, *Undergraduate Curatorial Assistant, Mammalogy Department*

Research and Travel Awards

- 2023: Oklahoma Department of Wildlife Conservation. (\$171,981). “A temporal assessment of bat community change and a baseline for bat health in eastern Oklahoma.” PI with DJ Becker as Co-PI
- 2023: The Nature Conservancy. (\$280,274). “A biodiversity inventory of the Cross Timbers Preserve.” CoPI with ES Bridge, J Hung, CD Siler, BD Smith, and JL Watters. PI: BW Hoagland
- 2023: OU Vice Provost for Research and Partnerships, Strategic Research Investment Program (\$38,698). “IsoPure 96 to enhance pathogen surveillance and genomic analyses of wildlife.” Co PI with A Yang and CD Siler. PI: DJ Becker.
- 2021: University of Oklahoma, Presidential International Travel Fellowship. (\$1000)
- 2021: Alaska Department of Game and Fish. (\$8,000) “Assessing dispersal and genetic diversity in the collared pika”
- 2021: Oklahoma EPSCoR. (\$15,000) “Computing in Modern Biology Workshop” Co-PI with S Mata, LR Stein, and KA Marske. PI: JF Kelly
- 2020: National Science Foundation. (\$199,170) “BII-Design: Institute for the biogeography of behavior.” Co-PI with KA Marske, AH Rowe, and CD Siler. PI: LR Stein
- 2020: OU Research Council, The University of Oklahoma. (\$7,000) “Linking dispersal and population connectivity across scales in the collared pika”
- 2020: Oklahoma Department of Wildlife Conservation. (\$222,053) “Establishment of a viable headstart and release program for Texas Horned Lizards (*Phrynosoma cornutum*) in Oklahoma.” Co-PI with JL Watters, KA Marske, K Sankaranarayanan, R Snyder, B Lock, and L Barrett. PI: CD Siler
- 2020: Vice Provost for Research and Partnerships, The University of Oklahoma. (\$17,328) “Effectiveness of computing in modern biology workshops for broadening participation in STEM.” Co-PI with S Mata, KA Marske, L Stein, and (unofficially) E Higgins and the graduate student STEM Inclusion Council. PI: J Kelly
- 2020: National Science Foundation. (\$399,861; \$160,524 to OU) “Collaborative research: squirreling around for science: incorporating sciurid behavioral research into the undergraduate curriculum.” PI with JM Duggan, J Varner, and EA Flaherty
- 2019: Czech Academy of Sciences. (\$194,991) “Bank vole genome sequencing collaboration” OU PI; Czech PIs: Dr. P Kotlik and S Markova
- 2018: OU Research Council, The University of Oklahoma. (\$14,760) “Comparative genomics of adaptation in North American pikas.”
- 2018: Oklahoma Department of Wildlife Conservation. (\$138,398) “Survey of the distribution, habitat, and current and historical presence of white-nose syndrome in the tri-colored bat in Oklahoma.” Co-PI with BS Coyner; PI: JK Braun
- 2017: Dovetail End-of-Year Award. (\$10,000) “Development of genomic resources for the Hoary marmot.” Co-PI; PI: LE Olson
- 2017: Dovetail Research-Impact Award. (\$20,300) “Genomic resources for the American pika: shared tools for studying and monitoring mammalian sentinel species’ for climate change.” Co-PI; PI: M Russello

- 2017: UW-NPS Research Grant. (\$5000) “Are all burns created equal? The role of fire interval on community structure in the Greater Yellowstone Ecosystem.” Co-PIs: ZP Roehrs and RS Seville
- 2016: Wyoming INBRE. (\$37,417) “Genomic assessment of the role of relatedness in spatial overlap in chipmunks.” Co PI: M Ben-David
- 2016: Wyoming INBRE. (\$15,000) “Development of a fire ecology system as a flexible framework for undergraduate-directed projects in ecology, evolution, and disease transmission.”
- 2015: UW-NPS Research Grant. (\$5,000) “Small mammal movements and fire history: testing the long-term effects of the 1988 Huckleberry Mountain Fire”. Co-PIs: RS Seville, ZP Roehrs, and MA Roehrs
- 2014: UW-NPS Research Grant. (\$2,500) “Long-term community responses to the 1988 Huckleberry Mountain fire.”
- 2011–2013: NSF, Systematics and Biodiversity Sciences. (\$332,674) Identifying the utility of species-tree approaches for deep radiations. Senior personnel; PI: LL Knowles
- 2008: NSF, Systematics and Biodiversity Sciences. (\$9,314) Proposal: “Dissertation research: Thrice through Beringia? Unraveling the evolution of North American pikas.” (DEB-0808619, Phylogenetic Systematics). Co-PI with LE Olson
- 2008: Ted McHenry Biology Field Research Fund. (\$5,000) Funding to conduct fieldwork in the Copper River Basin of southcentral Alaska
- 2008: American Society of Mammalogists Grant-in-Aid of Research. (\$1,500) Proposal: “Refugial signals in the Wrangell-St. Elias region”
- 2007: Alaska EPSCoR Dissertation Enhancement Grant. (\$9,000) Proposal: “Calibrating the clock for historical demography of the collared pika (*Ochotona collaris*): Phylochronology and population delimitation in an alpine lagomorph”
- 2006: Sigma Xi Grant-in-Aid. (\$720) Proposal: “Body size clines in a changing climate? Testing hypotheses of Bergmannian trends in an alpine lagomorph (*Ochotona collaris*)”
- 2003: Undergraduate Research Award Biological Science Division, University of Kansas. (\$291) Funding to purchase supplies to conduct undergraduate honors thesis research
- 2003–2010: Competitive travel grants awarded from the University of Kansas Howieson Opportunity Fund, The University of Alaska Graduate School, The Alaska Quaternary Center, and Alaska EPSCoR (\$6200, total)
- 2002, 2003: KU Natural History Museum and Biodiversity Research Center, Panorama Society Rudkin Award for Undergraduate Research. (\$5,000) Funding to conduct fieldwork in the Aleutian Islands

Awards, Fellowships, and Honors

- 2021: SSC Chair’s Citation of Excellence. International Union for the Conservation of Nature, Species Survival Commission award for outstanding contributions to conservation planning
- 2019: SSC Chair’s Citation of Excellence. International Union for the Conservation of Nature, Species Survival Commission award for outstanding contributions
- 2016: Science Initiative Summer Institute for Scientific Teaching, Faculty Fellow (\$6000)
- 2011–2013: FIRST IV Postdoctoral Fellow—competitive NSF-funded fellowship to improve the quality of undergraduate education through learner-centered teaching
- 2009: Institute of Arctic Biology Summer Fellowship in Ecology and Wildlife Biology. (\$10,000) Proposal: “Persistence through hard times? Pikas and the long-term effects of climate change within northern regions”
- 2008: Alaska Quaternary Center David and Rachel Hopkins Fellowship. (\$1,500) Proposal: “Refugium or crossroads? Alpine biogeography in the Wrangell-St. Elias region”

- 2008: American Society of Mammalogists Elmer C. Birney Honorarium. (\$1,500) Award to present research in the plenary session of the 2008 ASM meeting
- 2005–2006: Alaska EPSCoR Graduate Fellowship. (\$22,000) Proposal: “Patterns of phylogeographic and phenotypic divergence in a patchily distributed arctic alpine mammal, the collared pika (*Ochotona collaris*).” Academic year 2005-2006
- 2004: NSF Graduate Research Fellowship Program. Honorable Mention
- 2004: Pauline Kimball Prize, Biological Sciences Division, University of Kansas. (\$300) Awarded to an Outstanding Woman Senior in Biology

Invited Seminars

2023. Czech National Academy of Sciences, Prague, Czech Republic
2023. Biogeography of Behavior Symposium, Norman, OK
2023. Natural History Museum, London, United Kingdom (given by M. Theriot)
2022. 6th World Lagomorph Conference, Montpellier, France
2021. Kent State University, Kent, OH
2021. University of Oklahoma, Norman, OK
2021. University of Tennessee, Knoxville, TN
2020. Purdue University, West Lafayette, IN
2020. Purdue University, Student Chapter of the Wildlife Society, West Lafayette, IN
2020. Missouri State University, Springfield, MO. (Postponed due to Covid-19)
2019. Symposium Speaker, American Society of Mammalogists, Washington, DC
2019. University of Alaska Fairbanks, Fairbanks, AK
2018. Keynote Address, Central Plains Mammal Society, Stillwater, OK
2018. Board of Visitors, Sam Noble Oklahoma Museum of Natural History, Norman, OK
2016. Faculty Commencement Speaker, UW-Casper, Casper, WY
2014. AMK Harlow Seminar Series. AMK Ranch, Teton National Park, WY
2014. Zimmerman Lecture. Casper College, Casper, WY
2013. University of Wyoming, Laramie, WY
2013. University of Wyoming at Casper, Casper, WY
2013. Soka University of America, Aliso Viejo, CA
2013. University of California, Merced, Merced, CA
2012. Keynote address, Women in Science Day, Washburn University, Topeka, KS
2012. Departmental Seminar, Wright State University, Dayton, OH
2012. Workshop: Estimating Species Trees. Ohio State University, Columbus, OH
2008. Plenary session, American Society of Mammalogists Annual Meeting. Brookings, SD
2002. KU Natural History Museum Board of Fall Meeting. University of Kansas, Lawrence, KS

Oral Presentations

- Lanier, HC**, MdOR da Cruz^G, K Jones, KS Christie, KA Marske. 2023. A genomic assessment of connectivity among collared pika (*Ochotona collaris*) populations. The Wildlife Society Meetings. Louisville, KY [Invited Symposium Presentation]
- da Cruz, MdOR^G, S Markova, M Escalante, J Searle, P Kotlik, **HC Lanier**. 2023. Tracing the origins of adaptive genomic variation in bank voles from Great Britain. Central Plains Mammal Society Meetings, Omaha, NE
- Lanier, HC**, LE Olson, Q He, R Massati, LL Knowles. 2023. Federal eradication of a distinct island population of marmots from an Alaskan wildlife refuge. 13th International Mammal Congress, Anchorage, AK
- Theriot, MK^G, LE Olson, **HC Lanier**. 2023. Accounting for age: uncovering the nuanced drivers of mammal body-size responses to global change. 13th International Mammal Congress, Anchorage, AK [Invited Plenary address]

- da Cruz, MdOR^G, S Markova, M Escalante, J Searle, P Kotlik, **HC Lanier**. 2023. Does biogeographic history provision adaptive variation? A case study of bank voles in Britain. 13th International Mammal Congress, Anchorage, AK [*Recipient of an ASM Travel Award*]
- Theriot, MK^G, **HC Lanier**, LE Olson. 2023. Harnessing natural history collections to detect body-size change as a response to warming: a critique and review of best practices. Natural History Museum London, United Kingdom [*Invited presentation*]
- Theriot, MK^G, LE Olson, **HC Lanier**. 2022. Room to grow? Age as a driver of temporal body-size variation in Canada lynx (*Lynx canadensis*). Central Plains Society of Mammalogists Annual Meeting, Ozark Education Center, MO [*Best PhD Student presentation*]
- Lanier, HC** and AT Smith. Updating the global conservation status and threat assessments for world lagomorphs. 6th World Lagomorph Conference. Montpellier, France
- Roe, H^{UG}, J Cho^G, **HC Lanier**. 2022. Are students practicing what instructors are preaching? An investigation of the relationship between statistical numeracy, evolution knowledge, and belief in controversial scientific topics in the US. OU Undergraduate Research Day, Norman, OK
- Schultz, C^{UG}, MK Theriot^G, **HC Lanier**. 2022. Not in my backyard: Evaluating the presence and impacts of sampling biases against local specimens in museum collections," OU Undergraduate Research Day, Norman, OK
- Varner J, PK Connors, **HC Lanier**, JD Hanson, JM Duggan, LP Erb, EA Flaherty, CJ Yahnke, L Dizney. 2021. Squirreling around for science: doing field-based animal behavior research in undergraduate courses. Ecological Society of America, Life Discovery Conference. Estes Park, CO
- Duggan, JM, L Dizney, PK Connors, LP Erb, EA Flaherty, JD Hanson, **HC Lanier**, J Varner, C Yahnke. 2011. An introduction to networked CUREs using Squirrel-Net as a case study. Ecological Society of America Meetings (virtual conference)
- Sjodin BMF^G, KE Galbreath, **HC Lanier**, MA Russelo. 2021. Chromosome-level reference genome assembly for the American pika (*Ochotona princeps*). Evolution Meetings (virtual conference)
- Allen, AG^G, ZP Rohers, RS Seville, **HC Lanier**. 2021. Competitive release during fire succession drives ecological turnover in a small mammal community. American Society of Mammalogists 100th Annual Meeting (virtual conference) [*Invited Plenary address*]
- Dizney, L, J Varner, PK Connors, J Duggan, **HC Lanier**, LP Erb, EA Flaherty, C Yahnke, JD Hansen. 2021. Engaging undergraduate students in authentic research in mammalogy: Course-based Undergraduate Research Experiences (CUREs). American Society of Mammalogists 100th Annual Meeting (virtual conference)
- Duggan, J, PK Connors, LP Erb, EA Flaherty, JD Hansen, **HC Lanier**, J Varner, C Yahnke. 2021. Teaching mammalogy for a diverse classroom. American Society of Mammalogists 100th Annual Meeting (virtual conference)
- Theriot, MK^G, **HC Lanier**, LE Olson. 2021. Getting long in the tooth: investigating age-specific body size trends in masked shrews (*Sorex cinereus*). American Society of Mammalogists 100th Annual Meeting (virtual conference)
- Yahnke, C, **HC Lanier**, L Dizney, J Varner, JD Hansen, PK Connors, J Duggan, LP Erb, EA Flaherty. 2021. Embedding professional skill development into undergraduate mammalogy and ecology courses. American Society of Mammalogists 100th Annual Meeting (virtual conference)
- Theriot, MK^G, **HC Lanier**, LE Olson. 2021. Getting long in the tooth: investigating age-specific body size trends in masked shrews (*Sorex cinereus*). Central Plains Mammal Society Meeting (virtual conference) [*Best Masters Student presentation*]
- Coyner, BS, **HC Lanier**, JK Braun. 2021. Survey of the distribution, habitat, and current and historical presence of white-nose syndrome in the tri-colored bat in Oklahoma: Year 2. Oklahoma Bat Coordinating Team Meeting. [*Invited presentation*]

- Theriot, MK^G, **HC Lanier**, LE Olson. 2021. Measuring up: a review of best practices for data quality and repeatability in the study of animal body-size trends. Central Ecology & Evolution Conference, Oklahoma State University (virtual conference)
- Flaherty, EA, **HC Lanier**, J Varner, PK Connors, L Dizney, J Duggan, LP Erb, CJ Yahnke, J Hanson. 2021. Making career development more inclusive through course-based undergraduate research experiences (CUREs). Midwest Fish & Wildlife Conference
- Lanier, HC***, PK Connors*, J Varner, L Dizney, J Duggan, LP Erb, EA Flaherty, CJ Yahnke, J Hanson. 2021. Connected while distant: Networking CUREs across classrooms to create community and inspire students. Biology Beyond the Classroom Symposium, Society for Integrative and Comparative Biology (virtual conference) [*co-presented]
- Higgins, E^G, J Kelly, S Mata, **HC Lanier**, KA Marske, L Stein. 2020. Effectiveness of Computing in Modern Biology Workshops for Broadening Participation in STEM. Understanding Inequity/Advancing Equity Symposium, The University of Oklahoma, Norman, OK (online)
- Kelly, J, E Higgins^G, S Mata, **HC Lanier**, KA Marske, L Stein. 2020. Computing in Modern Biology: Broadening Participation in STEM. OU Research@Home, OU Vice Provost for Research, Norman, OK (online)
- Coyner, BS, JK Braun, **HC Lanier**. 2020. Survey of the distribution, habitat, and current and historical presence of white-nose syndrome in the tri-colored bat in Oklahoma. Oklahoma Natural Resources Conference, Norman, OK
- Lanier, HC**. 2019. Collect to protect: how past and present collecting promotes conservation. American Society of Mammalogists, Washington, DC
- Coyner, BS, JK Braun, **HC Lanier**. 2019. Survey of the distribution, habitat, and current and historical presence of White-nose Syndrome in the Tri-colored Bat in Oklahoma: Year 1. Oklahoma Academy of Sciences Annual Meeting, Edmond, OK
- Allen, AG^G, ZP Roehrs, RS Seville, **HC Lanier**. 2019. Dietary competition during fire succession influences ecological turnover between dominant small mammal species. Central Plains Mammal Society, Cape Girardeau, MO [*Awarded Best Masters Student Presentation*]
- Ratliff, LM^{UG}, KM Jones^{UG}, BS Coyner, JK Braun, **HC Lanier**. 2019. Establishing a historical baseline for the presence of white-nose fungus in *Perimyotis subflavus* in Oklahoma. OU Undergraduate Research Day, Norman, OK [*Selected for an Honors College Award for Distinction in Undergraduate Research*]
- Stover, SG, **HC Lanier**. 2019. Women geoscientists at State Geological Surveys: A status update. Geological Society of America, SC/NC/RM Section Meeting, Manhattan, KS.
- Lanier, HC**. 2018. Choose your own adventure: Does allowing students to participate in course development increase motivation? American Society of Mammalogists, Manhattan, KS
- Hanson, JD, **HC Lanier**, Duggan, JM, J Brown, PK Connors, L Dizney, LP Erb, EA Flaherty, J Varner, CJ Yahnke. 2018. Squirreling around for science: incorporating sciurid behavioral research into the undergraduate curriculum. American Society of Mammalogists, Manhattan, KS
- Duggan, JM, J Brown, PK Connors, L Dizney, LP Erb, EA Flaherty, JD Hanson, **HC Lanier**, J Varner, CJ Yahnke. 2018. Squirreling around for science: incorporating sciurid behavioral research into the undergraduate curriculum. American Society of Mammalogists, Manhattan, KS
- Baker, LD^{UG}, Chhatre VE, **HC Lanier**. 2017. Quantifying the impact of population size on natural selection across the genome. Undergraduate Research Day, Laramie, WY
- Diesburg, LM^{UG}, **HC Lanier**. 2017. Small mammal movements in previously burned habitats. Undergraduate Research Day, Laramie, WY
- Hein, LW^{UG} and **HC Lanier**. 2017. Even birds speak different dialects: How different are they? Undergraduate Research Day, Laramie, WY
- Tolbert, HN^{UG}, **HC Lanier**. 2017. Variation in raptor abundance along an urban-rural gradient. Undergraduate Research Day, Laramie, WY

- Ben-David, M, **HC Lanier**. 2017. Genomic assessment of the role of relatedness in spatial overlap among least chipmunks (*Tamias minimus*) in the Laramie Range. Wyoming INBRE Annual Conference, Laramie, WY. *Co-presented*.
- Lanier, HC**, ZP Roehrs, MA Roehrs, RS Seville. 2016. Long-term effects of the 1988 fires on small mammal communities in the GYE. 13th Biennial Scientific Conference of the Greater Yellowstone Ecosystem, Jackson Lake Lodge, WY
- Lanier, HC**, ZP Roehrs, MA Roehrs, RS Seville. 2016. Long-term fire succession as a framework for training undergraduate students in research. INBRE Fall Retreat, AMK Ranch, WY
- Andersson, IT^{UG}, **HC Lanier**. 2016. Mapping the dynamic ecology of ants (Formicidae) in post-burn Yellowstone. INBRE Fall Retreat, AMK Ranch, WY
- Hein, LW^{UG}, **HC Lanier**. 2016. Can sleepy bats think? INBRE Fall Retreat, AMK Ranch, WY
- Tolbert, HN^{UG}, **HC Lanier**. 2016. Does raptor distribution differ between urban and rural habitats of Wyoming? INBRE Fall Retreat, AMK Ranch, WY
- Paiz, DJ^{UG}, FG Schaffer^{UG}, AL Wangeline, **HC Lanier**, ZP Roehrs. 2016. Occupancy modeling to examine meso-mammal diversity and abundance at an urban-rural interface of Cheyenne, Wyoming. INBRE Fall Retreat, AMK Ranch, WY
- Loetscher, ME^{UG}, ZP Roehrs, MA Roehrs, **HC Lanier**, RS Seville. 2016. Ear and PIT tag loss rates in small mammals from the Greater Yellowstone Ecosystem. INBRE Fall Retreat, AMK Ranch, WY
- Carver, LL^{UG}, ZP Roehrs, MA Roehrs, RS Seville, **HC Lanier**. 2016. Red-backed vole movements through complex habitats: do downed trees act as highways? Undergraduate Research Day, Laramie, WY
- Hein, LW^{UG}, **HC Lanier**. 2016. Assessing the drivers of spatial variation in house wren song. Undergraduate Research Day, Laramie, WY
- Olson LE, KM Everson^G, AM Gunderson, KBP Hildebrandt, NJ Kerhoulas^G, **HC Lanier**, CE Rubin^G. 2016. Alpine small mammals at the top of the world: specimen-based insights into past and ongoing responses to climate change. Arctic Science Summit Week, Fairbanks, AK
- Carver, LL^{UG}, **HC Lanier**. 2015. Determining the factors shaping movement patterns of red-backed voles: Does fire history matter? INBRE Fall Retreat, AMK Ranch, WY
- Lanier, HC**, ZP Roehrs, JL Marsh^{UG}, ME Loetscher^{UG}, AJ Kulikowski^{UG}, LL Carver^{UG}, SE Haller^{UG}, KA Wilson^{UG}, DC Schlumpf^{UG}, MA Roehrs, RS Seville. 2015. Tracking long-term ecological changes in response to the 1988 Yellowstone fires. INBRE Fall Retreat, AMK Ranch, WY
- Hein, LW^{UG}, **HC Lanier**. 2015. Geographic analysis of song diversity in Wyoming populations of House Wren. INBRE Fall Retreat, AMK Ranch, WY
- Stack, N^{UG}, **HC Lanier**. 2015. Molecular identification of unknown Yellowstone shrews. Undergraduate Research Day, Laramie, WY
- Campbell, AL^{UG}, **HC Lanier**. 2015. Deer mouse (*Peromyscus maniculatus*) home range movements 25 years post burn of the 1988 Yellowstone Fires. Undergraduate Research Day, Laramie, WY
- Hein, LW^{UG}, **HC Lanier**. 2015. Analyses of geographic variability in Wyoming birdsong, Undergraduate Research Day, Laramie, WY
- Kulikowski, AK^{UG}, **HC Lanier**. 2015. Post-fire succession in Yellowstone's springtail community. Undergraduate Research Day, Laramie, WY
- Kulikowski, AJ^{UG}, **HC Lanier**. 2015. Springtails, succession, and the 1988 Yellowstone Fires. Zoology & Physiology Brownbag Seminar Series, Laramie, WY

- Lanier, HC**, R Massatti, Q He, LE Olson, LL Knowles. 2015. Colonization from divergent ancestors: glaciation signatures on contemporary patterns of genomic variation in collared pikas (*Ochotona collaris*). North American Pika Conference, Golden, CO
- Lanier, HC**, ZP Roehrs, KM Crouch-Jacobs^{UG}, SE Haller^{UG}, KA Wilson^{UG}, DC Schlumpf^{UG}, AL Campbell^{UG}, AJ Kulikowski^{UG}, MA Roehrs, RS Seville. 2014. 25-years of successional change in small mammal communities since the 1988 Yellowstone fires. INBRE Fall Retreat, AMK Ranch, WY
- Kulikowski, AJ^{UG}, **HC Lanier**. 2014. Yellowstone's springtail community 25 years after the fires. INBRE Fall Retreat, AMK Ranch, WY
- Elliot, BL^{UG}, **HC Lanier**, LM Moore. 2014. Soil comparison study: Germination and growth of *Artemisia tridentata*. INBRE Fall Retreat, AMK Ranch, WY
- Kulikowski, AJ^{UG}, JF Storz, and **HC Lanier**. 2014. Using species distribution modeling to elucidate the origin of high-altitude hemoglobin-oxygen affinity in deer mice. American Society of Mammalogists, Oklahoma City, OK [ASM Undergraduate Honoraria award]
- Kulikowski, AJ^{UG}, **HC Lanier**. 2014. Tracing the origins of high-altitude adaptation in deer mice using species distribution modeling. Undergraduate Research Day, Laramie, WY
- Lanier, HC**, LL Knowles. 2013. Candidate loci versus next-generation genomic data for phylogenetic estimation, Evolution, Snowbird, UT
- Lanier, HC**, LL Knowles. 2012. "Using species-tree methods to resolve deep phylogenies", Evolution, Ottawa, Ontario, Canada
- Reese, AT^{UG}, **HC Lanier**, EJ Sargis. 2012. Skeletal indicators of ecological specialization in pika (*Ochotona*). American Society of Mammalogists, Reno, NV [recipient of an ASM Undergraduate Honoraria award]
- Lanier, HC**, LL Knowles. 2011. How accurate are species trees when model assumptions are violated? Evolution, Norman, OK
- Lanier, HC**. 2010. Effects of latitude and climate cycling on phylogeographic structuring within pikas. Evolution, Portland, OR
- Lanier, HC**. 2010. Effects of latitude and climate cycling on phylogeographic structuring within pikas. American Society of Mammalogists, Laramie, WY
- Lanier, HC**, AM Gunderson, V Fedorov, M Weksler, LE Olson. 2009. Comparative phylogeography of alpine mammals in Eastern Beringia. American Society of Mammalogists, Fairbanks, AK
- Lanier, HC**, AM Gunderson, V Fedorov, M Weksler, LE Olson. 2009. Historical demography, range shifts, and interglacial refugia: Comparative phylogeography of alpine mammals in Eastern Beringia. Evolution, Moscow, ID
- Lanier, HC**, LE Olson. 2008. Phylogeography and historical demography of North America's northernmost ochotonid, the collared pika (*Ochotona collaris*). 3rd World Lagomorph Conference, Morelia, Mexico
- Lanier, HC**, LE Olson. 2008. Hard rocks and soft dates: Using molecular dating to evaluate the evolutionary history of pikas in North America. American Association for the Advancement of Science, Arctic Division, Fairbanks, AK
- Lanier, HC**, LE Olson. 2007. Living on the edge? Climate change and the evolution of the collared pika. Wildlife Society, Alaskan Chapter, Juneau, AK
- Lanier, HC**, LE Olson. 2006. Pikas, peaks, and post-glacial colonization: Phylogeography of an alpine lagomorph, *Ochotona collaris*. American Society of Mammalogists. Amherst, MA
- Lanier, HC**, LE Olson. 2005. Are North American pikas monophyletic? American Society of Mammalogists, Springfield, MO

Workshops and Workshop Presentations

- Duggan, L, EA Flaherty, **HC Lanier**, K Munroe, J Varner. 2023. Conferencing 101: Optimize the ASM/IMC conference experience. Workshop at the 13th International Mammalogical Congress. [A pre-conference workshop focused on undergraduate and graduate students]
- Bronson, C, PK Connors, L Dizney, J Duggan, L Erb, EA Flaherty, C Jordan, J Krumm, **HC Lanier**, J Varner, CJ Yahnke. 2023. Using networked Course-based Undergraduate Research Experiences (CUREs) and open-accessed digitized collections data to engage your students in mammalogy. Workshop at the 13th International Mammalogical Congress.
- Connors, PK, J Varner, **HC Lanier**, EA Flaherty, J Duggan, and C Yahnke. 2022. Bringing undergraduate research experiences into your class. Workshop at the American Society of Mammalogists Annual Meeting. [Hands-on workshop delivered for ~20 faculty and student participants]
- Munroe, K, **HC Lanier**, Blood, B, EA Flaherty, S Loeb, MJ Merrick. 2022. Developing effective curriculum vitae. Workshop at the American Society of Mammalogists Annual Meeting. [Hands-on workshop delivered for ~40 undergraduate and graduate students]
- Varner, J Duggan, **HC Lanier**, EA Flaherty, PK Connors, L Dizney, C Yahnke. 2021. Squirreling Around for Science: Using the Squirrel-Net CUREs. Workshop at the American Society of Mammalogists Annual Meeting. [Hands-on workshop delivered online; 54 live attendees, 103 registered received material asynchronously]
- Lanier, HC**. 2015. Using R for Research. LCLC Seminar in Casper, WY. [two 1.5 hr seminars given for faculty and staff at the University of Wyoming at Casper]
- Lanier, HC**. 2015. Using peer-to-peer interactions to improve student outcomes in the life sciences. LIFE Brownbag Seminar, Laramie, WY
- Lanier, HC**. 2012. Ohio State University, Workshop: Estimating Species Trees, Columbus, OH

Poster Presentations

- Hughes, A^{UG}, MK Theriot^G, **HC Lanier**. 2023. Shape-shifting squirrels: Investigating morphological variations in fox squirrels under climate change and urbanization. Central Plains Mammal Society Meetings, Omaha, NE [poster]
- Gilmore, EJ^G and **HC Lanier**. 2023. Predicting the sensitivity of Oklahoma's small mammals to habitat fragmentation: A trait-based approach. Central Plains Mammal Society Meetings, Omaha, NE [poster]
- Lemons, N^{UG}, MK Theriot^G, **HC Lanier**. 2023. Morphological analysis of a masked shrew (*Sorex cinereus*) population to establish age distribution from size variation. Central Plains Mammal Society Meetings, Omaha, NE [poster]
- Meacham, KR^G, KA Marske, **HC Lanier**. 2023. Predicting the impacts of a century of anthropogenic change on genetic diversity in collared pikas, a climate-sensitive species. Central Plains Mammal Society Meetings, Omaha, NE [poster]
- Theriot, MK^G, LE Olson, **HC Lanier**. 2023. Go big or go small? Building a mechanistic understanding of body-size variation in collared pikas (*Ochotona collaris*). Central Plains Mammal Society Meetings, Omaha, NE [poster]
- Hughes, A^{UG}, MK Theriot^G, **HC Lanier**. 2023. Shape-shifting squirrels: Investigating morphological variations in fox squirrels under climate change and urbanization. 13th International Mammal Congress, Anchorage, AK
- Varner, J, L Dizney, EA Flaherty, PK Connors, J Duggan, L Erb, C Yahnke, **HC Lanier**. 2023. Participation in a mammal-focused CURE improves students science identities. 13th International Mammal Congress, Anchorage, AK
- Hughes, A^{UG}, MK Theriot^G, **HC Lanier**. 2023. Are fox squirrels changing morphology due to climate change and urbanization? Central Ecology & Evolution Conference, Norman, OK
- Danz, DW^{UG}, VT Dinh^{UG}, **HC Lanier**. 2023. An investigation of white-nose syndrome in Oklahoma bats. FYRE poster session, Norman, OK

- Dinh, VT^{UG}, DW Danz^{UG}, **HC Lanier**. 2023. A noninvasive approach for using scat for monitoring dispersal in pika. FYRE poster session, Norman, OK
- Jones, K^{UG}, MdOR da Cruz^{G*}, K Christie, **HC Lanier**. 2022. How far is too far? Genetic diversity and connectivity of collared pika (*Ochotona collaris*) populations. American Society of Mammalogists 101st Annual Meeting, Tucson, AZ. (*presenter) [*Recipient of an ASM Travel Award*]
- da Cruz, MdOR^G, S Markova, P Kotlik, **HC Lanier**. 2021. An affordable workflow for SNP calling from whole genome sequences in mammals. American Society of Mammalogists 100th Annual Meeting (virtual conference)
- Martin, J^{UG}, **HC Lanier**. The emerging impacts of Rabbit Hemorrhagic Disease Virus 2 in the western United States. American Society of Mammalogists 100th Annual Meeting (virtual conference)
- Pitts, M^{UG}, MK Theriot^G, **HC Lanier**. 2021. The case of the shrinking rabbits: evaluating climate and diet drivers of temporal decline. American Society of Mammalogists 100th Annual Meeting (virtual conference)
- Beers, RA^{UG}, AG Allen^G, ZP Roehrs, RS Seville, **HC Lanier**. 2020. Wildfire succession shifts small mammal community diversity in the Greater Yellowstone Ecosystem. OU Undergraduate Research Day, Norman, OK
- Ratliff, LM^{UG}, G Tolentino Ramos^G, **HC Lanier**. 2019. Comparing preservation methods for the proliferation of small mammal DNA. Oklahoma Academy of Sciences Annual Meeting, Edmond, OK
- Beers, RA^{UG}, AG Allen^G, ZP Roehrs, RS Seville, **HC Lanier**. 2019. Fire succession impacts abundance but not diversity in Yellowstone small mammal communities. Central Plains Mammal Society, Cape Girardeau, MO
- da Cruz, MdOR^G, M Weksler, **HC Lanier**. 2019. Phylogenetic analysis of the family Cricetidae (Rodentia: Muroidea) based on the mitochondrial genome. Central Plains Mammal Society, Cape Girardeau, MO
- Allen, AG^G, ZP Roehrs, RS Seville, **HC Lanier**. 2019. The role of fire succession in dietary competition among small mammal species in the Greater Yellowstone Ecosystem. American Society of Mammalogists, Washington, DC [*Recipient of an ASM Travel Award*]
- Beers, RA^{UG}, AG Allen^G, ZP Roehrs, RS Seville, **HC Lanier**. 2019. Shifting small mammal community diversity due to wildfire succession in the Greater Yellowstone area. American Society of Mammalogists, Washington, DC [*Recipient of an ASM Undergraduate Honoraria*]
- Ratliff, LM^{UG}, KM Jones^{UG}, BS Coyner, JK Braun, **HC Lanier**. 2019. Establishing a historical baseline for the presence of white-nose fungus in *Perimyotis subflavus* in Oklahoma. American Society of Mammalogists, Washington, DC
- Tolentino Ramos, G^G, KA Marske, **HC Lanier**. 2019. Upward to heaven? Climate change risks and the future for collared pikas. American Society of Mammalogists, Washington, DC [*Recipient of an ASM Travel Award*]
- Connors, PK, J Varner, JS Brown, L Dizney, JM Duggan, LP Erb, EA Flaherty, JD Hanson, **HC Lanier**, CJ Yahnke. 2019. Squirreling around for science: incorporating sciurid behavioral research into the undergraduate curriculum. Society for Integrative and Comparative Biology, Tampa, FL
- Allen, AG^G, DC Allen, ZP Roehrs, RS Seville, **HC Lanier**. 2018. Is postfire succession correlated with ecological shifts in the North American deer mouse (*Peromyscus maniculatus*)? Central Plains Mammal Society, Stillwater, OK. [*Best Graduate Student Poster Award*]
- Beers, RA^{UG}, AG Allen^G, ZP Roehrs, RS Seville, **HC Lanier**. 2018. Fire succession as a driver of small mammal community dynamics in the Greater Yellowstone Ecosystem. Central Plains Mammal Society, Stillwater, OK. [*Best Undergraduate Student Poster Award*]

- Allen, AG^G, DC Allen, ZP Roehrs, RS Seville, **HC Lanier**. 2018. Investigating shifts in skull morphology and diet in North American deermice associated with wildfire. American Society of Mammalogists, Manhattan, KS
- Varner, J, PK Connors, J Brown, L Dizney, JM Duggan, LP Erb, EA Flaherty, JD Hanson, **HC Lanier**, CJ Yahnke. 2018. Squirreling around for science: incorporating sciurid behavioral research into the undergraduate curriculum. American Society of Mammalogists, Manhattan, KS
- Dodge, DMS^{UG}, **HC Lanier**. 2018. Crypsis and predation in post-burn populations of southern red-backed voles and deer mice. Undergraduate Research Day, Laramie, WY
- Paiz, DJ^{UG}, FG Schaffer IV^{UG}, AL Wangeline, **HC Lanier**, ZP Roehrs. 2017. Survey of meso-mammal diversity in an urban-rural interface on the high plains. 2017 Western Region IDeA Conference, Jackson, WY
- David, KL^{UG} and **HC Lanier**. 2017. The impacts of post-fire succession on native bee diversity within the Rocky Mountain Ecosystem. Undergraduate Research Day, Laramie, WY
- Paiz, DJ^{UG}, FG Schaffer IV^{UG}, AL Wangeline, **HC Lanier**, ZP Roehrs. 2017. Survey of meso-mammal diversity in an urban-rural interface on the high plains. Undergraduate Research Day, Laramie, WY
- Andersson, IT^{UG}, **HC Lanier**. 2017. The relationship between colonial and foraging habits of ants and native plants in post burn areas. Wyoming INBRE Annual Conference, Laramie, WY
- Baker, LD^{UG}, Chhatre VE, **HC Lanier**. 2017. Using predictive simulations and genomic variation to understand selection responses. Wyoming INBRE Annual Conference, Laramie, WY
- Diesburg, LM^{UG} and **HC Lanier**. 2017. Short-term and long-term movement patterns among small mammals in a disturbed habitat. Wyoming INBRE Annual Conference, Laramie, WY
- Hein, LW^{UG}, **HC Lanier**. 2017. The geography of birdsong variation. Wyoming INBRE Annual Conference, Laramie, WY
- Paiz, DJ^{UG}, FG Schaffer IV^{UG}, AL Wangeline, **HC Lanier**, ZP Roehrs. 2017. Survey of meso-mammal diversity in an urban-rural interface on the high plains. Wyoming INBRE Annual Conference, Laramie, WY
- Tolbert, HN^{UG} and **HC Lanier**. 2017. Variation in raptor abundance between urban and rural habitats. Wyoming INBRE Annual Conference, Laramie, WY
- Carver, LL^{UG}, ME Loetscher^{UG}, ZP Roehrs, MA Roehrs, RS Seville, **HC Lanier**. 2016. The long-term effects of post-fire succession on small mammal communities in the Greater Yellowstone Area. American Society of Mammalogists, Minneapolis, MN
- Paiz, DJ^{UG}, FG Schaffer IV^{UG}, LL Carver^{UG}, AL Wangeline, **HC Lanier**, ZP Roehrs. 2016. Occupancy modeling to examine meso-mammal diversity and abundance at an urban-rural interface in Cheyenne, WY. American Society of Mammalogists, Minneapolis, MN
- Ramírez, LN^{UG}, E Economo, B Blanchard^S, **HC Lanier**, LL Knowles. 2011. The Evolutionary History of Melanesian *Pheidole* (Hymenoptera: Formicidae) inferred with mtDNA. Evolution, Norman, OK
- Matson, JO, W Bulmer, RP Eckerlin, **HC Lanier**, N Woodman. 2010. Small mammals from a cloud forest in the Montañas de Cuilco, Huehuetenango, Guatemala. American Society of Mammalogists, Fairbanks, AK
- Lanier, HC**, LE Olson. 2006. Behavioral and morphological evolution in the genus *Ochotona*. Evo-WIBO, Port Townsend, WA

Professional Societies

American Society of Mammalogists 2004–present

Central Plains Mammal Society 2018–present

IUCN/SSC Lagomorph Specialist Group 2009–present (co-chair since 2016)

Society for the Study of Systematic Biology 2004–2016
World Lagomorph Society 2008–present

MUSEUM CURATION & CONTRIBUTIONS

Exhibit Development

- 2022, 2020: Curatorial consultant for incoming traveling exhibit “*Narwhal: Revealing an Arctic Legend*” (Postponed from 2020 to 2022 due to Covid-19)
2012: Conceptualized, developed and designed content and artwork for the University of Michigan Exhibit Museum special exhibit: “DNA and the Tree of Life”
2006: Content contributor for University of Alaska Museum special exhibit: “The Nature and Art of Collections”

Field Expeditions

- 2023: Cross-timbers Preserve Project. Mammal inventory and documentation project at The Nature Conservancy’s newly established preserve near Sapulpa, OK
2023, 2021, 2019: Alaska Pika Project. Pika mammal trapping and mark-recapture to examine the role of habitat quality and dispersal corridors in shaping pika population demography [2021 field work focused on Southeast Alaska, due to travel demand in the Interior]
2014-2019: Yellowstone Fire Project. Small mammal trapping (mark-recapture and specimen collecting) to examine post-fire succession with R Scott Seville, Zachary Roehrs, and Meredith Roehrs, as well as many undergraduates and K-12 teachers
2009: Huehuetenango, Guatemala. Small mammal trapping and mistnetting of bats in the highlands with Jack Matson, Ralph Eckerlin, Walt Bulmer, and Neal Woodman
2008: Wrangell-St. Elias National Park and Preserve: Alpine mammal inventory at three remote localities focusing on pikas, marmots, ground squirrels, and voles
2008: La Selva Biological Research Station, Costa Rica. Small mammal trapping with Andrea Romero, University of Kansas Ph.D. Student, in the lowland rainforest
2005–2007: University of Alaska Museum/Alaska Department of Fish and Game project on the distribution and phylogeography of the collared pika. Pika & small mammal survey, specimen collection, and preparation in the mountains of Alaska and Canada
2005–2006: Kluane Alpine Ecosystems Project, University of Alberta. Kluane National Park, Yukon Territory, Canada. David Hik, University of Alberta. Collared pika survey and live trapping, vegetation identification, and grazing studies
2005–2006: Kenai Small Mammal Inventory, Kenai Peninsula AK. Small mammal survey, collection, and preparation
2005: BLM Inventory in Nulato Hills. Survey, collection, preparation, and identification of small mammals
2003: Ouachita Mountain Bat Blitz; David Saugey, USFS. Ouachita National Forest, AR. Mistnetting and inventorying Arkansas bats
2002–2003: Western Aleutians Archeological and Paleobiological Project; Dr. Dixie West, PI. Attu Island, AK. Archeological and biological collecting experience
2001: Nelson Environmental Studies Area, University of Kansas; Dr. Norm Slade. Participated in long-term small mammal trapping project

Museum Specimen Contributions to Science

- 2001–present: >12,000 specimens collected and/or prepared in museum collections (accessible in VertNet, GBIF, Arctos, and/or the Sam Noble Museum Database)
2004–present: 1371 specimens identified in scientific collections (not all collections record this)
2005–present: 27 papers facilitated by specimens or data I have contributed

TEACHING EXPERIENCE & AWARDS

Awards and Honors

- 2016: Science Initiative Summer Institute for Scientific Teaching, Faculty Fellow
2015: TS Harris Faculty Award for Teaching
2014: Top Prof Award, Cap and Gown Chapter of Mortar Board (student-nominated)
2011–2013: FIRST IV Postdoctoral Fellow—competitive NSF funded fellowship to improve the quality of undergraduate education through learner-centered teaching
2009: Outstanding Graduate Student Teaching Assistant (for Mammalogy; nominated by students and faculty. First recipient of this then-new award)

Educational Grants ^(R) cross-listed under research, due to joint research and education aims)

- 2021: Oklahoma EPSCoR. (\$15,000) “Computing in Modern Biology Workshop” Co-PI with S Mata, LR Stein, and KA Marske and (unofficially) Ed Higgins. PI: JF Kelly
2020: Vice Provost for Research and Partnerships, The University of Oklahoma. (\$17,328)^R “Effectiveness of computing in modern biology workshops for broadening participation in STEM.” Co-PI with S Mata, KA Marske, L Stein, and (unofficially) Ed Higgins and the graduate student STEM Inclusion Council. PI: J Kelly
2019: National Science Foundation. (\$399,861; \$160,524 to OU)^R “Collaborative research: squirreling around for science: incorporating sciurid behavioral research into the undergraduate curriculum.” PI with JM Duggan, J Varner, and EA Flaherty
2016: University of Wyoming Innovative Summer Session Course Proposal. (\$5000) “Charles Darwin and the Galapagos Islands: The Evolution of Evolution”. Co-PI: RS Seville
2016: EPSCoR Wyoming Women in Science and Engineering Program. (\$1,000) Travel grant to attend the American Society of Mammalogists Annual Meeting in Minneapolis, MN with 1 UW undergraduate and 3 community college students
2015: Life Sciences Mini-Grant. (\$1000) “Using fire research to provide tiered active learning experiences”. Co-PI: Margo Spurrier (Natrona County School District)
2009: UAF Office of the Provost. (\$16,230) Upgrades to and enhancement of the Department of Biology & Wildlife's mammal teaching collection. Co-PI with LE Olson

Instructor Experience

- 2023, 2021, 2019: University of Oklahoma, Instructor of Record—Evolution (BIOL 2013); 3 credit, majors core course [2019: co-taught 2 sections with KA Marske]
2023, 2022: University of Oklahoma, Instructor of Record—Research Doctoral Dissertation (BIOL 6980); graduate majors elective
2023, 2021, 2020, 2019: University of Oklahoma, Instructor of Record—Graduate Independent Study (BIOL 5990) [Fa 2019 as a directed readings course with 4 graduate student participants]
2023: University of Oklahoma, Instructor of Record—Research for Master's Thesis (Biol 5980); graduate majors elective, 1-3 credits
2023, 2020, 2019, 2018, 2017: University of Oklahoma, Instructor of Record—Independent Study (BIOL 4990); 1-3 credits
2023, 2021, 2020: University of Oklahoma, Instructor of Record—Honors Research (BIOL 3980); 1-2 credit
2023, 2021, 2020: University of Oklahoma, Instructor of Record—Honors Reading (BIOL 3960); 1-2 credits
2022, 2020, 2018: University of Oklahoma, Instructor of Record—Mammalogy (BIOL 4034); 3 credit (including lab) undergraduate majors elective
2021, 2020, 2019, 2018: University of Oklahoma, Instructor of Record—Independent Study (BIOL 3990); 1-3 credits

- 2019: University of Oklahoma, Instructor of Record—Field Mammalogy (BIOL 4023/5023); 3 credit (including lab) undergraduate/Graduate majors elective taught at the OU Biological field station
- 2020, 2019, 2018: University of Oklahoma, Instructor of Record—Independent Study (BIOL 3990); 1-3 credits
- 2018: University of Oklahoma, Instructor of Record—Seminar in Ecology and Evolutionary Biology (BIOL 5471); 1 credit graduate elective course
- 2017: University of Wyoming, Co-Instructor—Darwin and the Galapagos (A&S 4900); 1-3 credit study abroad course in the Galapagos Islands
- 2017: University of Wyoming, Co-Instructor—Darwin, the Galapagos Islands, and the Evolution of Evolution (A&S 4900); 1 credit undergraduate majors elective
- 2017, 2016, 2015, 2014: University of Wyoming, Instructor of Record—Evolution (LIFE 3500) 3 credit undergraduate majors core course
- 2017, 2015: University of Wyoming at Casper, Instructor of Record—Mammalogy (ZOO 4370); 3 credit (including lab) undergraduate majors elective
- 2016, 2015, 2014, 2013: University of Wyoming at Casper, Instructor of Record—Scientific Communication (ZOOL 4100); 3 credit undergraduate majors core course
- 2016, 2014: University of Wyoming at Casper, Instructor of Record—Conservation Biology (BOT/ENR/ZOO 4420) 3 credit undergraduate majors elective
- 2016, 2015, 2014: University of Wyoming at Casper, Instructor of Record—Problems in Zoology (ZOO 4900); a 1-3 credit independent study for undergraduate research students
- 2016, 2014: University of Wyoming at Casper, Instructor of Record—Ornithology (ZOO 4350); 3 credit (including lab) undergraduate majors elective
- 2016, 2015: University of Wyoming at Casper, Instructor of Record—Practicum in Laboratory Instruction (ZOO 4975); 1-3 cr. independent study for undergraduate teaching assistants
- 2015: University of Wyoming, Instructor of Record—Computational Biology (A&S 4900) undergraduate majors core course. [*Newly designed course for undergrad majors*]
- 2012: University of Michigan, Instructor of Record—Introductory Biology: Ecology and Evolutionary Biology (BIOL 171); undergraduate majors course
- 2009: University of Alaska Fairbanks, Interim Instructor—Advanced Topics in Evolution: Variation below the species level (BIOL 644); graduate-level course
- 2008, 2006, 2004: University of Alaska Fairbanks, Graduate Teaching Assistant and Lab Instructor—Mammalogy (BIOL 425); undergraduate majors course
- 2008: University of Alaska Fairbanks, Graduate Teaching Assistant and Lab Instructor—Vertebrate Paleontology (GEOS F492/BIOL F492); undergraduate elective
- 2004: University of Kansas, Undergraduate Teaching Assistant—Evolution (BIOL 412)

Postdoctoral Fellows Mentored

- 2019–2021: Andy Baltensperger. Postdoctoral Fellow through the University of Alaska Fairbanks (co-mentored with LE Olson). *Andy is now research faculty at the University of Alaska Fairbanks.*

Graduate Students Mentored

- 2023–present: Emilyn J. Gilmore. Master's student. Small mammal community ecology along a shifting baseline of Anthropogenic impacts
- 2023–present: Kailey Meacham. Master's student. Pika population responses to global change
- 2020–present: Miranda K. Theriot. PhD student. Harnessing natural history collections to track mammalian responses to global change in the Anthropocene. *Miranda gave a Plenary Award Address at the 2023 International Mammal Congress Meetings.*

- 2019–present: Marcos da Cruz. PhD student. Biogeographic history, environmental stability, and adaptive genomic diversity of small mammals. *Marcos was the recipient of the 2023 Student Diversity Award from the OU Biology Diversity, Equity, and Inclusion Committee.*
- 2021–2023: Madelyn Kirsch. Master's student. Understanding the evolutionary, ecological, and disease-based factors that shape salamander microbiomes. *Madelyn is now a research technician with the USDA.*
- 2018–2021: Addison G. Allen. Master's student. The impacts of fire on small mammal community assembly. *Addison received an honorable mention for her NSF GRFP application and is now a research scientist at West Environmental Consulting.*
- 2018–2021: Giovanni Tolentino Ramos. Master's student. Landscape genomics and gene flow in the collared pika. *Giovanni was awarded a Louis Stokes Alliance NSF Fellowship, a National Research Traineeship Grant, and an NSF GRFP award.*

Undergraduate and High School Students Mentored

- 2023–present: Mariana Borrás Gomez (University of Oklahoma), Undergraduate researcher: Understanding age-based cranial change in shrew skulls
- 2023–present: Vy Dinh (University of Oklahoma), First Year Research Experience (FYRE): Developing a protocol for genomic DNA extraction from lagomorph fecal pellets
- 2022–present: Andrew Hughes (University of Oklahoma), Undergraduate researcher: Evaluating the effects of urbanization and temperature on cranial shape in fox squirrels. *Andrew was selected as an outstanding graduating senior for 2023.*
- 2023–present: Noah Lemons (University of Oklahoma), Undergraduate researcher: Evaluating the effects of urbanization, temperature, and age on cranial shape
- 2023–present, 2021: Jess Martin (University of Oklahoma), Honors research: An assessment of *ex situ* conservation approaches for lagomorphs; First Year Research Experience (FYRE): Tracking the impact of Rabbit Hemorrhagic Disease Variant 2 (RHDV2) in western rabbits (2021)
- 2023: Drew Dantz (University of Oklahoma), First Year Research Experience (FYRE): Evaluating the prevalence of white-nose fungus in Oklahoma bats
- 2021–2022: Hannah Roe (University of Oklahoma), Undergraduate researcher: Measuring the effect of domain-specific knowledge on belief in polarizing scientific topics. *Hannah was selected as an outstanding graduating senior for 2023.*
- 2021–2022: Caleigh Schultz (University of Oklahoma), Undergraduate researcher: Evaluating collection biases for common mammal species
- 2019–2022: Kimberly Jones (University of Oklahoma), Honors student: Landscape genetics and barriers to dispersal in pikas (2020-2021); First Year Research Experience (FYRE): Tracing the history of white-nose fungus in the tricolored bats of Oklahoma (2018). *Kim started Medical School in Fall 2022.*
- 2021: Leah Boskovich (University of Oklahoma), First Year Research Experience (FYRE): Evaluating the presence of white-nose fungus in Oklahoma bats
- 2021: Marisa Pitts (University of Oklahoma), Undergraduate Researcher: Changes in rabbit body size across time
- 2019–2020: Allie R. Carlile (University of Oklahoma), Undergraduate Researcher: Changes in small mammal diversity in response to fire succession
- 2018–2020: Robert A. Beers (University of Oklahoma), Independent Study: Small mammal community assembly during post-fire succession
- 2019: Kaiti K. Carpenter (University of Oklahoma), Undergraduate Researcher: Changes in small mammal diversity in response to fire succession
- 2019: Clarissa Ashton (University of Oklahoma), Undergraduate Researcher: Changes in small mammal diversity in response to fire succession

- 2019: Cameron Felty (University of Oklahoma), Independent Study: The impacts of long-term fire succession on arthropod community biodiversity and abundance
- 2019: Jackie Ball (University of Oklahoma), Independent Study: The impacts of fire interval on hymenopteran communities
- 2018–2020: Lisa M. Ratliff (University of Oklahoma), Optimizing workflows for extracting genomic DNA from small volume tissue samples (2020); Tracing the history of white-nose fungus in the tricolored bats of Oklahoma (2019); Independent Study: Identifying reproductive patterns across heteromyid rodents (2018). *Lisa completed a Master's in Science Education at the University of Oklahoma.*
- 2018–2019: Sean Lindley (University of Oklahoma), Undergraduate Researcher: Investigating deer mouse skull morphology. *Sean continued on to pursue a Master's degree at Humboldt State University.*
- 2017–2018: Addison Allen (University of Oklahoma), Independent Study: Investigating postfire shifts in deer mice related to skull morphology and diet. *Addison completed her Master's at the University of Oklahoma and is now working for WEST environmental consulting.*
- 2018: Anna Hong (University of Oklahoma), First Year Research Experience (FYRE) student; Investigating the role of fire interval in shaping beetle communities
- 2017–2018: David (Shayne) Dodge (University of Wyoming at Casper), INBRE Undergraduate Research Internship: Does habitat mismatch drive species abundance? Testing whether crypsis influences post-burn predation in *Myodes gapperi* and *Peromyscus maniculatus*. *Shayne is now a Master's student at the University of Wyoming.*
- 2017: Jordan Janski (Casper College), Undergraduate research student: small mammal ecology and mark-recapture in a field setting
- 2016–2017: Lucas Baker (University of Wyoming at Casper), INBRE Undergraduate Research Internship: identifying the selection signals in RADseq data and their biological correlates across alpine populations. *Luke is now a PhD student at the University of South Dakota.*
- 2016–2017: Laura Diesburg (University of Wyoming at Casper), INBRE Undergraduate Research Internship: quantifying the impact of roads as barriers to long-term gene flow in small mammals
- 2016–2017: Haley Tolbert (University of Wyoming at Casper), INBRE Undergraduate Research Internship: distance-sampling to understand urban-rural gradients in raptor distributions; niche modeling to predict mammal species diversity and distributions in Wyoming
- 2015–2017: Isaac Andersson (University of Wyoming at Casper), INBRE Undergraduate Research Internship: bottom-up vs. top-down controls on abundance in Formicidae based on fire history
- 2014–2017: Lewis Hein (University of Wyoming at Casper), INBRE Undergraduate Research Internship: development of a bioinformatics pipeline for studying geographical differences in house wren songs. *Lewis received an REU Award to study at the Smithsonian Tropical Research Institute in 2016.*
- 2016–2017: Devyan Paiz and Francis Schafer (Laramie County Community College): Occupancy modeling of camera trap data of meso-mammals from Laramie County (co-advised with Zachary Roehrs, LCCC). *Devyan continued to UW for her BS degree.*
- 2016: Kendra David (University of Wyoming at Casper), INBRE Undergraduate Research Internship: Community phylogenetics and in areas of post-fire succession: do burns benefit native bees? *Kendra is now a veterinary student at Michigan State University.*
- 2015–2016: Lorraine Carver (University of Wyoming at Casper), INBRE Undergraduate Research Internship: Red-back vole movements through a complex of downed trees. *Lorraine was awarded the L. Floyd Clark Award for her Research.*
- 2015–2016: Michelle Sherwin (University of Wyoming at Casper), INBRE Undergraduate Research Internship: barcoding of shrews to understand community dynamics in the Yellowstone region

- 2015: Amber Whinnery (University of Wyoming at Casper), undergraduate research student: museum specimen preparation, data management, and small mammal ecology
- 2015: Stacy Faigle (University of Wyoming at Casper), undergraduate research student working on small mammal fire ecology and data analysis techniques
- 2015: Albert Napolitano (University of Wyoming at Casper), undergraduate research student: small mammal ecology and mark-recapture in a field setting
- 2014, 2015: Brittany Elliot (University of Wyoming at Casper), INBRE Undergraduate Research Internship: Sagebrush seed germination and soil type (co-advised with Lynn Moore, UWC); community dynamics in invertebrates during long-term fire succession.
- 2014-2015: Valorie Lyman (University of Wyoming at Casper) INBRE Undergraduate Research Internship: Phylogeography of deer mice across environmental and elevational gradients
- 2014-2016: Nathan Stack (University of Wyoming at Casper) undergraduate research project on molecular barcoding of shrews from the Yellowstone region
- 2014: Alicia Violin (University of Wyoming at Casper) undergraduate research student working on the molecular genetics. *Alicia was accepted to Colorado State University for Veterinary School.*
- 2014: Erica Caves (University of Wyoming at Casper) undergraduate research student working on molecular techniques and small mammals from Wyoming
- 2014: Kevin Crouch-Jacobs (Casper College; University of Wyoming at Casper) INBRE Undergraduate Research Internship: the impacts of the Yellowstone fires on habitat and small mammal occurrence
- 2014: Ashkia Campbell (Casper College) INBRE Internship: fire history and the movements of deer mice in complex habitats. *Ashkia is currently completing a biology degree at UW.*
- 2013-2015: Andy Kulikowski (University of Wyoming at Casper) INBRE Undergraduate Research Internship: project on how functional traits mediate collembolan abundance in mid-successional forests (2015); ecological niche modeling to trace historical movements of the deer mouse (2014). *Andy was awarded an ASM undergraduate honoraria, the Outstanding A&S Undergraduate in Biology, and the Maggie Murdoch Award, completed his PhD, and is now a research scientist at the University of California Santa Cruz.*
- 2013-2014: Delina Barbosa (University of Wyoming at Casper) INBRE Transition Fellow: barcoding project to examine communities of White Sands beetles. *Delina was awarded NSF GRFP in 2015 and has now completed her Master's at the University of Wyoming.*
- 2010–2012: Aspen Reese (Yale University; co-advised with Eric Sargis, Yale University) Senior Thesis: "Skeletal Indicators of Ecological Specialization in Pika (Mammalia, Ochotonidae)." *Aspen was awarded the Greg Yamanaka Senior Essay Prize (Yale) and the ASM Undergraduate Student Research Award and is now an Assistant Professor at the University of California San Diego.*
- 2010–2012: Lizette Ramirez (University of Michigan) Honors Thesis: "The Evolutionary History of the Pacific Islands Pheidole (Hymenoptera: Formicidae) inferred with mtDNA." *Lizette recently completed a Master's degree at the University of Michigan.*
- 2010–2011: Kandice Karll (Adrian College) molecular ecology & landscape genetics techniques
- 2007: Heather Bryant, Elizabeth Miller, and Sarah Moore (University of Alaska Fairbanks) in fieldwork techniques for the study of small mammals. *Sarah went on to complete a Master's degree at Oregon State University.*
- 2005–2006: Ruth Ann Dohner (senior at West Valley High School, Fairbanks, AK) Molecular ecology of small mammals. *Ruth Ann won the Alaska Statewide Science Symposium for this research.*

Graduate Committee Memberships (University of Oklahoma Biology unless otherwise indicated)

2023–present Sam O’Dell (PhD). Advisor: James Huang
2023–present Anna James (PhD). Advisor: Alex Bentz
2022–present Kenneth Shimer (PhD, Geography). Advisor: Bruce Hoagland
2022–present Meagan Allira (MS). Advisor: Daniel Becker
2022–present Dineesha Premathilake (PhD). Advisor: Katharine Marske
2022–present Lauren Lock (PhD). Advisor: Daniel Becker
2021–present Alex Franzen (PhD). Advisor: Caryn Vaughn
2021–present Ethan Kelly (MS). Advisor: Katharine Marske
2020–present Luis Cueto Aparicio (PhD). Advisor: Katharine Marske and Jeremy Ross
2020–present Alva Strand (PhD). Advisor: Jeff Kelly
2019–present Emily Troyer (PhD). Advisor: Dahiana Arcila
2019–present Sierra Smith (PhD). Advisor: Cameron Siler
2023 Zach Heiple (PhD). Advisor: Dahiana Arcila
2021–2023 Alex Fulton (MS). Advisor: Cameron Siler/ Liz Bergey
2021–2022 Madelyn Kirsch (MS). Advisor: Cameron Siler
2021–2022 Christina Kolbmann (PhD). Advisor Jeff Kelly
2020–2023 Kristen Rayfield (PhD, Anthropology). Advisor: Courtney Hofman
2018–2023 Matthew Worsebe (PhD). Advisor: Larry Wider
2018–2022 Jessica McLaughlin (PhD). Advisor: Matt Miller/ Dahiana Arcila/JP Masly
2018–2021 Kai Wang (PhD). Advisor: Cameron Siler
2018–2021 Elyse Ellsworth (MS). Advisor: Liz Bergey/Cam Siler
2019–2020 Rita Austin (PhD). Advisor: Courtney Hofman
2018–2020 Miranda Vesey (MS). Advisor: Cam Siler
2015–2020 Luis Alza (PhD, Biology; University of Miami). Advisor: Kevin McCracken
2015–2016 Mance Hurley (MS, University of Wyoming). Advisor: Jennifer Forrester
2015–2016 Kayla Eaton (MS, University of Wyoming). Advisor: Jennifer Forrester
2014–2016 Kelly Rush (MS, University of Wyoming). Advisor: Jennifer Forrester

Undergraduate Honors Defense Committee Memberships

2022 Vanessa Hughes (BS Biology, honors). Advisor: Katharine Marske
2019 Sarah Swiston (BS Biology, honors). Advisor: Katharine Marske
2019 Hannah Tully (BS Biology, honors). Advisor: Katharine Marske

OUTREACH AND PROFESSIONAL SERVICE

Outreach

2023: Brownbag talk for museum volunteers on using the collection to understand mammalian responses to global change, Sam Noble Museum, Norman, OK
2023: Enrichment Day classes (2) on mammal defenses at Terra Verde Discovery School, Norman, OK
2022: Presentation on bats at Terra Verde Discovery School, Norman, OK
2021: Computing in Modern Biology Workshop, *Computing from Field to Computer*, digital video pre-recorded that was showed at the workshop (online)
2021: Dia de los Muertos para los Animals, Sam Noble Museum, Norman, OK
2021: Jurassic Journeymen Club collections tour, Sam Noble Museum, Norman, OK
2021: Natural History: Live!, Expert Scientist, Sam Noble Museum (online), Norman, OK
2020: Computing in Modern Biology Workshop, developed and taught 2-day *Using R in Conservation* course for high school, undergraduate, and graduate students
2020: Sam Noble@Home, Expert Scientist, Sam Noble Museum (online), Norman, OK
2019: Super Saturday, Expert Scientist, Sam Noble Museum, Norman, OK

- 2018–2019: Sam Noble Social Media, Mammal Monday posts (Facebook & Twitter)
2018: Bioblitz, Expert Scientist, Greenleaf State Park, OK
2018: Presentation on being a mammalogist and the mammal collection for the summer Sam Noble Museum 'Ologist 2.0 Camp.
2018: Presentation on bat biology, acoustic detectors, and demonstration of mist-netting for Bioblitz at Greenleaf State Park.
2017: Spooktacular, Sam Noble Museum, Norman, OK
2017: Curator Brownbag, Sam Noble Museum, Norman, OK
2017: Bioblitz, Black Mesa State Park, Oklahoma
2017: Science-in-Action/ID Day, Sam Noble Museum, Norman, OK
2016–2017: Werner Wildlife Museum (WWM) board member and Vice President. Consultation on exhibits, educational outreach plans, and assistance with public openings.
2015–2017: Board Member for the Murie Audubon Society, Casper, WY
2016: Presentation on pikas at the Werner Wildlife Museum, Casper, WY
2016: Camera-trapping project with Star Lane project-based learning high school
2016: Presentation on eagle feeding ecology for gifted and talented students, Casper WY
2015: Presentation on fire ecology and small mammal successional dynamics at the Murie Audubon Society, Casper WY
2015: Casper College girls in science day workshop on wildlife genetics & forensics
2014: “Go WEST!” girls in science day; planning committee member and presenter
2012: Keynote speaker at Women in Science Day, Washburn University, Topeka, KS. Event geared towards introducing 8th grade girls to science careers
2012: Presented on vertebrates for summer science camp at Estabrook Elementary School
2010: Science Fair Judge for University of Michigan BioBlitz poster session - a program targeting children from the Detroit school system
2010: Presentation on mammals, natural history, and art at Anne Wien Elementary School
2008: Science Fair Judge at Wood River Elementary & Anne Wien Elementary Schools
2008: Compiled statistics and prepared slides for presentation commemorating the 100,000th and 100,001st specimens in the University of Alaska Museum’s mammal collection
2007: Provided the subject area expertise for article on pikas and photography published by Moose Peterson in the *BT Journal*
2007: University of Alaska Fairbanks, presentation on mammals and climate change for the Rural Alaskan Honors Institute-II (a summer program for Alaskan high school students)
2002–2017: Public education and outreach at the KU Natural History Museum, University of Alaska Museum, University of Michigan Museum of Zoology, and the Werner Wildlife Museum. Activities include open houses, collections tours, preparation of exhibit content, and public demonstrations.

Departmental, College, & University Service

- 2024–present: Graduate Admissions Committee, School of Biological Sciences, Biology Department
2022–present: CODE Workshop, faculty advisory panel for graduate-student led computing workshop
2019–present: Head of Museum Genomics Lab at the Sam Noble Museum (Core facility shared by 3-5 biological departments at the Sam Noble Museum)
2018–present: Graduate Education Committee, Biology Department
2019–2023: Website Committee, Biology Department
2020–2023: Biology Department Retreat Committee, Chair
2022: Curriculum Consolidation Committee, School of Biological Sciences, DFCAS
2020–2022: Strategic Planning Committee, Sam Noble Museum
2017–2020: Graduate Scholarships Committee, Biology Department

2019–2020: Advisor to the Four-Year Research Experience Program, OU-wide
 2018: Ecomunch Seminar Series organizer, Biology Department
 2017: Winter Convocation, Faculty Marshal
 2017–2018: Genomic Ichthyologist Search Committee, Sam Noble Museum
 2015–2017: Zoology Degree Assessment Committee, Sam Noble Museum
 2013–2017: Learning Community Leadership Committee (UWC); chair 2015-present
 2011–2012: Early Career Science Symposium Committee at the University of Michigan
 2008–2009: Organized the Ecology and Evolutionary Genetics Seminar Series at the University of Alaska
 2006–2007: President of Biology & Wildlife Graduate Student Association
 2006–2009: Organizer of University of Alaska Museum evolution journal club
 2005: Organizer of Biology & Wildlife Graduate Student Seminar Series

Mammalogy Department Contributions to Outreach (2017-2023 unless specified)

Mammalogy Department webpage views (2017-2018)	19,168
Visitors touring the mammalogy collection	~742
Student volunteers participating in collection activities	22
Adult volunteers participating in collection activities	7
Volunteer hours devoted to collection activities	~930
OU Undergraduate research projects using the collections	17

Professional Service

2023–present: Oklahoma Bat Working Group (invited)
 2022–present: North American Lagomorph Working Group, Steering Committee (invited)
 2021–present: *Journal of Mammalian Evolution*, Associate Editor (invited)
 2019–present: Central Plains Mammal Society, Oklahoma Representative (elected)
 2018–present: Oklahoma Mammals Technical Committee (invited)
 2009–present: IUCN/SSC Lagomorph Specialist Group (co-chair: 2016–present; invited)
 2011–2021: American Society of Mammalogists, Recording Secretary (elected)
 2009–2011: American Society of Mammalogists Board of Directors (elected)
 2008–2009: Graduate student representative on and co-chair of the Host Committee for the 89th Annual Meeting of the American Society of Mammalogists
 American Society of Mammalogists committee service: *Development Committee, Education and Graduate Students Committee, Grants-In-Aid Committee, Resolutions Committee, Patton Award Committee, Planning and Finance, President’s Ad-Hoc Committee on Membership, President’s Ad-Hoc Committee on Publishing*
 Journal Ad Hoc reviewer: *Alaska Species Ranking System, American Naturalist, Arctic Science, Bioinformatics, Biological Journal of the Linnaean Society, Biotropica, BMC Evolutionary Biology, BMC Research Notes, CBE-Life Sciences Education, Conservation Genetics, Current Zoology, Diversity and Distributions, Evolution, Global Change Biology, Heredity, IUCN Red List, International Journal of Evolutionary Biology, Journal of Molecular Evolution, Journal of Biogeography, Journal of Heredity, Journal of Mammalogy, Journal of Mammalian Evolution, Mammalia, Molecular Ecology, Molecular Phylogenetics and Evolution, PeerJ, PLoS ONE, Polar Biology, Systematic Biology, Zootaxa*
 Media interviews: *The Atlantic, BioTA Podcast, BT Journal, The Desert Sun, The Guardian, Jackson Hole Magazine, KFOR News, Metro Family Magazine, OU Nightly, Science, Tulsa Voice, Washington Post*
 Presentation review: *American Society of Mammalogists student presentations, Central Plains Mammal Society, OU 3-Minute Thesis Competition*
 Proposal reviewer: *ASM Grants-in-Aid of Research, ASM Fellowships, ASM Patton Award, Center for Global Change Student Grant Competition, National Science Foundation (ad*

HC Lanier—Curriculum Vitae

hoc and panel reviews), OU Biology Departmental Graduate Awards, Society for Systematic Biology Mini-ARTS Awards, WY-TWS Graduate Student Scholarships, Z&P Departmental Scholarship Fautin Award, Wyoming INBRE