

CHRIS J. LAW, PHD

NSF Postdoctoral Fellow & Gerstner Scholar

American Museum of Natural History, New York, NY | University of Washington, Seattle, WA

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EDUCATION

2013–19 **Ph.D. Ecology and Evolutionary Biology.** University of California, Santa Cruz

2008–12 **B.S. Environmental Systems.** University of California, San Diego

2010 **Marine Biology and Terrestrial Ecology Program.** University of Queensland

ACADEMIC HISTORY

2021– **Visiting Scholar,** University of California, Berkeley

2019– **NSF Postdoctoral Fellow & Gerstner Scholar,** American Museum of Natural History and the University of Washington

Sponsors: Dr. John Flynn, Dr. Robert Voss, & Dr. Sharlene Santana

2013–19 **PhD Student,** Ecology & Evolutionary Biology, University of California Santa Cruz
Advisor: Dr. Rita Mehta

2012–13 **Staff Research Associate,** Scripps Institution of Oceanography
Advisors: Dr. Kelly Dorgan & Dr. Greg Rouse

2011–12 **Research Assistant,** Scripps Institution of Oceanography
Advisors: Dr. Kelly Dorgan & Dr. Greg Rouse

FELLOWSHIPS and AWARDS

\$637,428 in awarded fellowships

2021–23 **Early Career Provost Fellowship,** University of Texas, Austin \$141,000

2019–22 **Postdoctoral Fellowship,** National Science Foundation. (DBI–1906248) \$207,000

2019–21 **Gerstner Scholars Postdoctoral Fellowship,** American History Museum of Natural. *Declined to accept NSF postdoctoral fellowship* \$127,030

2019 **Wake Award** (finalist), Society of Integrative and Comparative Biology

2018 **D. Dwight Davis Award** (finalist), Society of Integrative and Comparative Biology

2018–19 **Chancellor’s Dissertation Quarter Fellowship,** UC Santa Cruz. \$13,086

ARCS Scholar Award, ARCS Foundation. \$11,000

EEB Departmental Quarter Fellowship, UC Santa Cruz. \$15,500

2015–18 **Graduate Research Fellowship,** National Science Foundation. \$138,000

2014–15	Regent’s Fellowship , UC Santa Cruz.	\$15,406
2014	NSF GRFP Honorable Mention , National Science Foundation. Global Oceans Student Award , Friends of Long Marine Laboratory.	
2013–14	Regent’s Fellowship , UC Santa Cruz.	\$15,406

RESEARCH and TRAVEL GRANTS

\$702,411 in awarded funding for research and travel

National Science Foundation grants

2021–23	Directorate for Biological Sciences: Integrative Research in Biology (IntBio). “Disentangling the genetic, biomechanical, and deep-time factors underlying mammalian skeletal diversity.” PI Tseng, Co-PI Hlusko, Co-PI Law (official Co-PI status 11/1/21) (DBI–2128146). <i>I conceived the project idea and wrote the initial draft.</i>	\$585,301
2017–19	Division of Environmental Biology (DEB). “DISSERTATION RESEARCH: The effects of sexual dimorphism on morphological diversification of Musteloidea.” Co-PI Law & PI Mehta (DEB–1700989). <i>I conceived the project idea and wrote the proposal.</i>	\$19,189

Misc grants

2022	Early Career Provost Fellow Research Funds , University of Texas.	\$10,000
2021	Research Exchange , Research University Alliance.	\$1,500
	Iuvo Postdoctoral Award , University of Washington.	\$1,416
	Research Grant , American Museum of Natural History.	\$15,000
	Early Career Provost Fellow Research Funds , University of Texas.	\$10,000
2020	Vertebrate Paleontology Collections Study Grant , Burke Museum.	\$1,400
	Research Grant , American Museum of Natural History.	\$5,000
2019	Research Grant , American Museum of Natural History.	\$5,000
	Student Travel Award , Society of Marine Mammalogy.	\$250
	Graduate Student Association Travel Grant , UC Santa Cruz. [2013–2019].	\$2,234
2018	Collections Study Award , Natural History Museum of LA County.	\$1,175
	Student Travel Award , American Society of Mammalogists.	\$400
	Fellowship in Marine Mammals , Rebecca & Steve Sooy Fund.	\$3,500
2017	Packard Endowment Grant , Packard Foundation. “Linking feeding performance & energetics to dietary specialization & fitness in southern sea otters.” Co-PIs: Law and Mehta.	\$17,844
	Field Museum Visiting Scholarship , Field Museum.	\$1,520
	Grant-in-Aid of Research , Society of Integrative & Comparative Biology.	\$1,894
	IMC-12 Travel Grant , American Society of Mammalogists.	\$1,250

2016	James L. Patton Grant , American Society of Mammalogists.	\$5,000
2015	Research Grant , American Cetacean Society—Monterey Bay Chapter.	\$1,500
	Collection Study Grant , American Museum of Natural History.	\$700
	Rosemary Grant Student Grant , Society for the Study of Evolution.	\$1,800
	Grant-in-Aid of Research , Sigma Xi.	\$700
	Fellowship in Marine Mammals , Rebecca & Steve Sooy Fund.	\$5,500
2014	Lerner Gray Fund , American Museum of Natural History.	\$2,000
	Grant-in-Aid of Research , American Society of Mammalogists.	\$1,500
	Myers Trust Grant , Myers Oceanographic & Marine Biology Trust.	\$2,000
	Student Research Grant , Friends of Long Marine Laboratory.	\$850
	<i>*Chosen as one of the top two recipients</i>	
2013	Fellowship in Marine Mammals , Rebecca & Steve Sooy Fund.	\$1,250

Unfunded NSF grant applications

2017	Division of Integrative Organismal Systems (IOS). “Collaborative Research: Anvil or Jaws: The biomechanics, safety, and profitability of using tools in the southern sea otter.” With PI Mehta & Co-PI Tinker. Requested \$400,740. I conceived of the project idea, wrote the initial draft, and collected preliminary data and analyses. Invited to submit full proposal	
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PEER-REVIEWED PUBLICATIONS

high school student mentee; undergraduate student mentee

- X) Lang MM, Bertrand OC, Flores GSM, Law CJ, Abdul-Sater JAD, Spakowski S, Silcox MT. Minor revision. Scaling Patterns of Cerebellar Petrosal Lobules in Euarchontoglires: Impacts of Ecology and Phylogeny. Target: **Anatomical Records**.
- X) Law CJ. Major revision. Imperfect convergence of elongate body shapes in carnivoran mammals. Target: **Systematic Biology**.
- X) Law CJ, Tinker MT, Fujii, JA, Nicholson T, Staedler M, Tomoleoni J, Young C, & Mehta RS. In prep. Tool use increases foraging success in southern sea otters. Target: **Science**.
- X) Grossnickle DM, Brightly WH, Law CJ, Pevsner SK, Roston RA, Stanchak KE, & Weaver LN. In prep. Testing the prevalence of morphological convergence among mammalian forelimb skeletons. Target: **Evolution**.
- X) López-Torres S, Bertrand OC, Fostowicz-Frelik L, Lang MM, Law CJ, San Martin-Flores G, Schillaci MA, Silcox MT. In prep. The allometry of brain size in Euarchontoglires and an exploration of group-specific encephalization quotients. Target: **Journal of Mammalogy**.
- 24) Shrestha MB, Shrestha G, Reule S, Oli S, Ghartimagar TB, Singh G, Tripathi DM, Law CJ, Shah KB, & Savage M. 2021. First evidence of Eurasian otter in Nepal in three decades. **IUCN-SSC Otter Specialist Group Bulletin**. 38.

- 23) Higham TE, Ferry LA, Schmitz L, Irschick DJ, Starko S, Anderson PSL, Bergmann PJ, Jamniczky HA, Monteiro LR, Navon D, Messier J, Carrington E, Farina SC, Feilich KL, Hernandez LP, Johnson MA, Kawano SM, **Law CJ**, Longo SJ, Martin CH, Martone PT, Rico-Guevara A, Santana SE, and Niklas KJ. In press. Linking biomechanical models and functional traits to investigate phenotypic diversity. ***Trends in Ecology and Evolution***. doi.org/10.1016/j.tree.2021.05.009
- 22) **Law CJ**. 2021. Ecological drivers of carnivoran body shape evolution. ***The American Naturalist***. 198:406–420. doi.org/10.1086/715588
- 21) **Law CJ**. 2021. Evolutionary and morphological patterns underlying carnivoran body shape diversity. ***Evolution***. 75:365–375. doi.org/10.1111/evo.14143
- 20) **Law CJ**. 2020. Sex-specific ontogenetic patterns of cranial morphology, theoretical bite force, and underlying jaw musculature in fishers and American martens. ***Journal of Anatomy***. 237:727–740. doi.org/10.1111/joa.13231
- 19) **Law CJ**. 2019. Solitary meat-eaters: solitary, carnivorous carnivorans exhibit the highest degree of sexual size dimorphism. ***Scientific Reports***. 9:15344. doi.org/10.1038/s41598-019-51943-x
- 18) **Law CJ** & Mehta RS. 2019. Dry versus wet and gross: Comparisons between the dry skull method and gross dissection-based modeling in bite force estimations. ***Journal of Morphology***. 280:1706–1713. doi.org/10.1002/jmor.21061
- 17) **Law CJ**. 2019. Evolutionary shifts in extant mustelid (Mustelidae: Carnivora) cranial shape, body size, and body shape coincides with the Mid-Miocene Climate Transition. ***Biology Letters***. 15:20190155. doi.org/10.1098/rsbl.2019.0155
- 16) **Law CJ**, Slater GJ, & Mehta RS. 2019. Shared extremes by ectotherms and endotherms: body elongation in mustelids is associated with small size and reduced limbs. ***Evolution***. 73:735–749. doi.org/10.1111/evo.13702
- 15) **Law CJ**, Duran E, Hung N, Richards E, Santillan I, & Mehta RS. 2018. Effects of diet on cranial morphology and biting ability in musteloid mammals. ***Journal of Evolutionary Biology***. 31:1918–1931. doi.org/10.1111/jeb.13385
- 14) Higgins BA, **Law CJ**, & Mehta RS. 2018. Eat whole and less often: ontogenetic shift reveals size specialization on kelp bass by the California moray eel, *Gymnothorax mordax*. ***Oecologia***. 188:875–887. doi.org/10.1007/s00442-018-4260-x
- 13) **Law CJ** & Mehta RS. 2018. Carnivory maintains cranial dimorphism between males and females: Evidence for niche divergence in extant Musteloidea. ***Evolution***. 72:1950–1961. doi.org/10.1111/evo.13514
- 12) **Law CJ**, Slater G, & Mehta RS. 2018. Lineage diversity and size disparity in Musteloidea: testing patterns of adaptive radiation using molecular and fossil-based methods. ***Systematic Biology***. 67:127–144. doi.org/10.1093/sysbio/syx047

- 11) **Jones K[†]** & **Law CJ[†]**. 2018. Differentiation of craniomandibular morphology in two sympatric *Peromyscus* mice (Cricetidae: Rodentia). ***Mammal Research***. 63:277–283. doi.org/10.1007/s13364-018-0364-2 [†]Joint first authors
- 10) **Law CJ**. 2018. *Mustela sibirica* (Carnivora: Mustelidae). ***Mammalian Species***. 50:109–118. doi.org/10.1093/mspecies/sev013
- 9) Kienle SS, **Law CJ**, Costa DP, Berta A, & Mehta RS. 2017. Revisiting the behavioural framework of feeding in predatory aquatic mammals. ***Proceedings of the Royal Society B***. 284:20171035. doi.org/10.1098/rspb.2017.1035
- 8) **Law CJ**, Baliga VB, Tinker MT, & Mehta RS. 2017. Asynchrony in craniomandibular development and growth in *Enhydra lutris nereis* (Carnivora: Mustelidae): Are southern sea otters born to bite? ***Biological Journal of Linnean Society***. 121:420–438. doi.org/10.1093/biolinnean/blw050
- 7) **Hung N** & **Law CJ**. 2016. *Lutra lutra* (Carnivora: Mustelidae). ***Mammalian Species***. 48:109–122. doi.org/10.1093/mspecies/sew011
- 6) **Law CJ**, Young C, & Mehta RS. 2016. Ontogenetic scaling of theoretical bite forces in southern sea otters (*Enhydra lutris nereis*). ***Physiological and Biochemical Zoology***. 89:347–363. doi.org/10.1086/688313
- 5) **Law CJ**, **Venkatram V**, & Mehta RS. 2016. Sexual dimorphism of craniomandibular morphology in southern sea otters (*Enhydra lutris nereis*). ***Journal of Mammalogy***. 97:1764–1773. doi.org/10.1093/jmammal/gyw148
- 4) Baliga VB & **Law CJ**. 2016. Cleaners amongst wrasses: phylogenetics and evolutionary patterns of cleaning behavior within Labridae. ***Molecular Phylogenetics and Evolution***. 94:424–435. doi.org/10.1016/j.ympev.2015.09.006
- 3) **Law CJ**, Dorgan KM, & Rouse GW. 2014. Relating divergence in polychaete musculature to different burrowing behaviors: A study using Opheliidae (Annelida). ***Journal of Morphology***. 571:548–571. doi.org/10.1002/jmor.20237
- 2) Dorgan KM, **Law CJ**, & Rouse GW. 2013. Meandering worms: Mechanics of undulatory burrowing in muds. ***Proceedings of the Royal Society B***. 280:20122948. doi.org/10.1098/rspb.2012.2948
- 1) **Law CJ**, Dorgan KM, & Rouse GW. 2013. Validation of three sympatric *Thoracophelia* species (Annelida: Opheliidae) from Dillon Beach, California using mitochondrial and nuclear DNA sequence data. ***Zootaxa***. 3608:67–74. doi.org/10.11646/zootaxa.3608.1.4

INVITED BOOK REVIEWS

- 1) **Law CJ**. 2019. Book review of *Biology and Conservation of Musteloids* by David W. Macdonald, Chris Newman, and Lauren A. Harrington. ***The Quarterly Review of Biology***. 94:297–298. doi.org/10.1086/705063

TEACHING EXPERIENCE

Biological Collections Ecology and Evolution Network (BCEENET)

Collaborating Developer (2020): provide support in the development of Course-based Undergraduate Research Experiences (CUREs) that uses online natural history collection data records

University of Washington

Guest lecturer: **Mammalogy** (Fall 2021); **Mammalogy** (Winter 2021)

University of California, Santa Cruz

Co-instructor: **Comparative Vertebrate Anatomy Lab** (Fall 2017); **Comparative Vertebrate Anatomy Lab** (Summer 2017)

Guest lecturer: **Comparative Vertebrate Anatomy Lab** (Spring 2019); **Functional Anatomy** (Spring 2017); **Mammalogy** (Fall 2015); **Development and Physiology** (Fall 2015); **Biology of Marine Mammals** (Spring 2015); **Comparative Vertebrate Anatomy Lab** (Fall 2014)

Teaching Assistant: **Marine Mammals** (Spring 2015); **Comparative Vertebrate Anatomy Lab** (Fall 2014); **Development & Physiology** (Spring 2014)

Invited Panelist: **Creating Active and Inclusive Section Experiences Workshop** (Fall 2017)

STUDENTS MENTORED

Graduate Students.

Mentored 1 graduate students: **William Zang** (West Chester University, Jan 2021–present)

Undergraduate Researchers. student co-author

Mentored 14 undergraduate students: **Emily Blackwell** (Smith College/AMNH REU, Jun 2021–present); **Abby Burtner** (University of Washington, Jan 2021–present); **Annika McFeely** (University of Washington, Jan 2021–present); **Hannah Rickman** (University of Washington, Jan 2021–present); **Bennett Slibeck** (Columbia, Nov 2019–present); **Ana Moreland** (UCSC, Jun 2018–Apr 2019); **Carly Sanchez** (UCSC, Jun–Sept 2018); **Parker Kaye** (UCSC, Sept 2017–Mar 2018); **Jennilyn Stenske** (UCSC, June 2017–June 2019); **Ekai Richards** (UCSC, Jan–Aug 2017); **Sam Sambado** (UCSC, Jan–Apr 2017); **Kaz Jones** (UCSC, Sept 2016–June 2017); **Meghan Yap-Chiongco** (UCSC, Aug 2016–Jun 2017); **Shohei Burns** (UCSC, Mar–Aug 2014)

High School Students. student co-author

Mentored 5 high school students: **Emma Duran** (UCSC, June–Aug 2017); **Isaac Santillan** (UCSC, June–Aug 2017); **Anna Wadhwa** (UCSC, June–Aug 2016); **Vikram Venkatram** (UCSC, June–Aug 2015); **Nancy Hung** (UCSC, June–Aug 2014)

Cultivamos Excelencia Program

Mentored 2 community college students: **Jasmin Lara** (Sept 2018–June 2019); **Joanna Gonzalez Lugo** (Sept 2018–June 2019)

Small Mammal Undergraduate Research in the Forest (SMURF) Program (2015–2019)

Trained and supervised 52 SMURF interns in mammal trapping: **Jasmin Regalado** (Apr– June 2019), **Filippa Erixon** (Apr–June 2019), **Jamie Becher** (Apr–June 2019), **Olivia Wilms** (Apr– June 2019), **Josue Lopez** (Apr–June 2019), **Maria Zepeda** (Apr–June 2019), **Marie Gredell** (Apr–June 2019), **Christina Olague** (Apr–June 2019), **Amanda Smith** (Jan–Mar 2019), **Ari Statler** (Jan–Mar 2019), **Giselle Wendt** (Jan–Mar 2019), **Ishana Shukla** (Jan–Mar 2019), **Linnea Gullikson** (Jan–Mar 2019), **Lucy Malamud-Roam** (Jan–Mar 2019), **Nicholas Bergeron** (Jan–Mar 2019), **Vanessa Cortez** (Jan–Mar 2019), **Gabby Reynosa** (Sept–Jun 2019); **Maggie Choi** (Sept–Dec 2018); **Ray Hunter** (Sept–Dec 2018); **Benji Le** (Sept–Dec 2018); **Freddy Manzarex** (Sept–Dec 2018); **Shelby Thompson** (Sept–Jun 2019); **Jingyun Wu** (Sept–Dec 2018); **Samantha Abarca** (Apr–June 2018); **Lia Del Vecchio** (Apr–June 2018); **Maggy Feng** (Apr–June 2018); **Esmeralda Reyes** (Apr–June 2018); **Ciera Castillo** (Jan–Apr 2018); **Noelle Duerwald** (Jan–Apr 2018); **Shaun Kehrmeyer** (Jan–Apr 2018); **Samuel Sacco** (Jan–Apr 2018); **Samantha Gautreaux** (CSMB, Jan–Apr 2018); **Jazmin Rios** (CSMB, Jan–Apr 2018); **David Castaneda** (Sept–Dec 2017); **Aaron Gormley** (Sept–Dec 2017); **Sabrina Sanchez** (Sept–Dec 2017); **Kaz Jones** (Sept 2016–June 2017); **Jessica Elgersma** (Sept 2016–June 2017); **Deanna Rhoades** (Sept 2016–June 2017); **Carly Sanchez** (Sept 2016–June 2018); **Jazzmin Ilas** (Sept 2016–June 2017); **Sami Akiba** (Sept 2016–June 2017); **Isabelle Panza** (Sept 2016–June 2017); **Megan Pasternak** (Sept 2016–June 2017); **Erin Huntsinger** (Sept 2016–June 2017); **Ilona Wilde** (Sept 2016–June 2017); **Tatiana Delgadillo** (Sept 2016–Dec 2016); **Ana Moreland** (Sept 2016–Dec 2016); **Aliya Cacanindin** (Sept 2016–Dec 2016); **Ethan Slattery** (Sept 2016–Dec 2016); **John Ahrens** (Sept 2016–Dec 2016); **Natalie Neff** (Sept 2015–June 2017)

RELEVANT RESEARCH EXPERIENCE

Museum Collections Work

Collection visits (10 institutions): American Museum of Natural History; Burke Museum of Natural History and Culture; California Academy of Sciences; Field Museum; Kansas University Natural History Museum; Natural History Museum of Los Angeles County; National Museum of Natural History; UC Berkeley Museum of Vertebrate Zoology; UC Santa Cruz Norris Center for Natural History; Yale Peabody Museum of Natural History.

Loans (12 institutions): Academy of Natural Sciences of Drexel University; Burke Museum of Natural History and Culture; Cornell University Museum of Vertebrates; Denver Museum of Nature and Sciences; Florida Museum of Natural History; Louisiana Museum of Natural History; Museum of Comparative Zoology; Moore Laboratory of Zoology; Museum of Southwestern Biology; Texas Cooperative Wildlife Collection; University of Arkansas Collections Facility; University of Michigan Museum of Zoology.

Field Experience

UC Santa Cruz Natural Reserve, CA, USA. Trapped and tagged small mammals for long-term population study. [2015–2019].

Fort Ord Natural Reserve, CA, USA. Trapped and tagged small mammals for long-term population study. [2015–2019].

Catalina Island, CA, USA. Trapped, tagged, and collected moray eels for morphological analyses and long-term population. [2015, 2016, 2018, 2019].

Rancho los Pinos, Baja California, Mexico. Trapped, tagged, and collected moray eels for morphological analyses and long-term population. [2019].

San Juan Island, WA, USA. Trapped and collected marine invertebrates for biomechanical analyses and accession in Scripps Institution of Oceanography collection [2010–2012].

San Diego, CA, USA. Trapped and collected marine invertebrates for biomechanical analyses and accession in Scripps Institution of Oceanography collection [2010–2012].

PROFESSIONAL SERVICE

Research Mentor

- 2021 NSF PRFP Research Experience for Undergraduates (REU) Program
- 2021 AMNH Research Experience for Undergraduates (REU) Program
- 2020 AMNH Research Experience for Undergraduates (REU) Program
- 2018–19 *Cultivamos Excelencia* Community College Research Program
- 2015–19 Small Mammal Undergrad Research in Forest (SMURF) Program
- 2014–17 Science Internship Program (SIP)

Reviewer for Scientific Journals

American Naturalist, Anatomical Records, Biological Journal of the Linnean Society, Biology Letters, Evolution, Functional Ecology, Integrative Organismal Biology, Journal of Anatomy, Journal of Experimental Biology, Journal of Mammalian Biology, Journal of Mammalogy, Journal of Zoology, Nature Communications, PeerJ, PLOS One, Proceedings of the National Academy of Sciences, Proceedings of the Royal Society B

Reviewer for Professional Societies

- 2021 **Reviewer.** Abstracts for SACNAS Research Presentation

SCIENCE COMMUNICATION

K–12

- 2021 **Presenter.** California State Summer School for Mathematics and Science, (COSMOS), Santa Cruz, CA
- 2021 **Presenter.** K–5 Science & Nature Program, American Museum of Natural History
- 2019 **Presenter.** Watsonville Wetlands Watch, CA
- 2018 **Presenter.** Boys and Girls Clubs of Santa Cruz County, CA.
- 2017 **Presenter.** Ocean Explorers Summer Camp, Seymour Center, CA
- 2016 **Presenter.** Ocean Explorers Summer Camp, Seymour Center, CA
- 2014 **Presenter.** Science Alive Workshop, Gavilan College, Gilroy, CA

Public Talks/Outreach

- 2021 **Interviewee.** KSQDFM Santa Cruz Naturalist segment
Speaker. Curated Conversations at the Burke Museum
- 2020 **Exhibit Presenter.** Burke Museum Member's Night
- 2018 **Speaker.** Coastal Student Awards Celebration.
- 2015 **Speaker.** Citizen Science at the Santa Cruz Public Libraries.
Speaker. Annual Sea Otter Awareness Week.

INVITED SEMINARS

- 2021 **University of California Museum of Paleontology.** Paleo Seminar.
University of Washington. Biology Seminar.
American Museum of Natural History. Comparative Biology Seminar.
- 2020 **Burke Museum, University of Washington.** Paleo Seminar.
Cornell University. Ecology and Evolutionary Biology Seminar.
New York Institute of Technology. Anatomy Department Seminar.
Adelphi University. Biology Department Seminar.
- 2019 **University of California, Santa Cruz.** Ecology and Evolutionary Biology Seminar.
Santa Clara University. Biology Department Seminar.
University of California, Davis. Center for Population Biology Seminar.

INVITED WORKING GROUPS

- 2019 **National Science Foundation Rules of Life: Forecasting and Emergence in Living Systems (RoL:FELS) Working Group.** *Reciprocal illumination between ecology and biomechanics: evolution, integration, and constraint.* PIs: Tim Higham and Lara Ferry.

CONTRIBUTED PRESENTATIONS

- 2021 **Society for the Study of Evolution Conference.** Virtual. 2 talks (1 as sole author and 1 as co-author).
American Society of Mammalogists Conference. Virtual. 2 talks (1 as sole author and 1 as co-author).
Sea Otter Research and Conservation Symposium. Virtual. 1 talk as first author.
Society for Integrative and Comparative Biology Conference. Virtual. 3 talks (1 as sole author and 2 as co-author).
- 2020 **Western Society of Naturalists Conference.** Virtual. 1 talk as first author.
Animal Behavior Society Conference. Virtual. 1 talk as first author.
American Society of Mammalogists Conference, Boulder, CO. 1 talk as sole author.
CANCELLED DUE TO COVID-19
Society for Integrative and Comparative Biology Conference, Austin, TX. 1 talk as first author and 1 poster as sole author.
- 2019 **World Marine Mammal Conference,** Barcelona, Spain. 1 talk as first author.

- International Congress of Vertebrate Morphology**, Prague, Czech Republic. 1 talk as sole author.
- Society for Integrative and Comparative Biology Conference**, Tampa, FL. 1 talk as first author and 1 poster as first author.
- 2018 **American Society of Mammalogists Conference**, Manhattan, KS. 1 talk as first author and 1 poster as co-author.
- Sea Otter Research Update Meeting**, Santa Cruz, CA. 1 talk as first author.
- Society for Integrative and Comparative Biology Annual Meeting**, San Francisco, CA. 3 talks (1 as first author and 2 as co-author) and 1 poster as co-author.
- 2017 **12th Annual Mammalogical Congress**, Perth, Western Australia. 1 talk as first author and 1 poster as co-author.
- Society for Integrative and Comparative Biology Conference**, New Orleans, LA. 1 talk as first author.
- 2016 **Southern Sea Otter Research Update Meeting**, Santa Cruz, CA. 1 talk as first author.
- Society for Integrative and Comparative Biology Conference**, Portland, OR. 1 talk as first author.
- 2015 **Society for Integrative and Comparative Biology Conference**, West Palm Beach, FL. 1 talk as first author.
- 2013 **Society for Integrative and Comparative Biology Conference**, San Francisco, CA. 1 poster as first author.
- 2012 **Society for Integrative and Comparative Biology Conference**, Charleston, SC. 1 poster as first author.