

DR. JASON N. BRUCK, NATIONALITY: USA
PH.D., M.A. (HON), UNIVERSITY OF CHICAGO
B.SC. (SUMMA CUM LAUDE), LONG ISLAND UNIVERSITY

CURRENT AFFILIATION: ASSISTANT PROFESSOR, DEPARTMENT OF BIOLOGY,
STEPHEN F. AUSTIN STATE UNIVERSITY
TELEPHONE: 315-345-9424
E-MAIL: JASON.BRUCK@SFASU.EDU

EDUCATION

Doctor of Philosophy; Department of Comparative Human Development: Behavioral Biology
Dissertation: New Perspectives on Dolphin Whistles: Evaluating Signal Context, Categorization and Memory.
University of Chicago, Chicago, IL, USA

Master of Arts; Department of Comparative Human Development: Behavioral Biology
Thesis: Population Differences in Beacon Use of Juvenile Belding's Ground Squirrels.
University of Chicago, Chicago, IL, USA
Thesis Honors *GPA 3.9/4.0*

Bachelor of Science; Interdisciplinary Psychology/Biology
Southampton College of Long Island University, Southampton, NY
Dean's List, 1998-2002; Faculty Honors, 1998-2002 *GPA 4.0/4.0*

EMPLOYMENT

2020-Present **Assistant Professor of Biology**
Stephen F. Austin State University; Nacogdoches, TX

2017-2020 **Teaching Assistant Professor of Integrative Biology**
Oklahoma State University; Stillwater OK

2015-2017 **Marie Curie Research Fellow**
University of St. Andrews; St. Andrews, UK

2014-2015 **Visiting Assistant Professor of Zoology**
Oklahoma State University; Stillwater OK

2009-2014 **Guest Teacher**
Jefferson County Public Schools; Louisville KY

2002 **Adjunct Instructor of Experimental Animal Learning**
Southampton College; Southampton, NY

CURRENT GRANTS

2024-2025	Start Date:	1/1/2024 (Awarded)
	Funding:	\$39,879 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	Passive Hormone Analysis in Sea Mammals
	Role:	PI (with Dr. Jamey Jacob, USRI, Oklahoma State University)
2024-2025	Start Date:	1/1/2024 (Awarded)
	Funding:	\$14,859 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	The Effects of Anthropogenic Noise on Attention, Learning, and Memory Communication Phase II
	Role:	PI
2023-2024	Funding:	\$120,000 (Direct Costs)
	Agency:	Georgia Aquarium
	Title:	The Vocal Repertoire of Beluga Whales
	Role:	PI
2023-2023	Funding:	\$2,300
	Agency:	Stephen F. Austin State University College of Sciences and Math
	Title:	Summer Undergraduate Research Experiences
	Role:	PI
2023-2024	Funding:	\$29,027 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	The Use of Drones with Dolphins in Conservation Efforts
	Role:	PI (with Dr. Jamey Jacob, USRI, Oklahoma State University)
2023-2024	Funding:	\$14,545 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	Effects of Anthropogenic Noise on Bottlenose Dolphin Cognition
	Role:	PI (with Dr. Laela Sayigh, WHOI/Hampshire College)
2023	Funding:	\$15,000
	Agency:	President's Innovation Fund Implementation Grant
	Title:	DRONES II – Drone Research and Outreach in the Natural and Environmental Sciences- President's Innovation Fund II
	Role:	PI
2022-2023	Funding:	\$3,009 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	The Use of Drones with Dolphins
	Role:	PI

2022-2023	Funding:	\$2,905 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	Kin-recognition in bottlenose dolphins
	Role:	PI
2022-2023	Funding:	\$3,199 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	Effects of Anthropogenic Noise on Bottlenose Dolphin Cognition
	Role:	PI
2019-2023	Funding:	\$20,000 (Direct costs)
	Agency:	CH Woodrow Wilson
	Title:	Fellowship for Excellence in Teaching
	Role:	PI/Fellow

PENDING GRANTS

2024-2027	Funding:	\$1,000,000
	Agency:	WM Keck Foundation Science and Engineering Grant
	Title:	Developing next generation UAVs for passive health assessments in small and large cetaceans
	Role:	Co-PI (with Dr. Jamey Jacob, USRI, OSU)

PREVIOUS RESEARCH GRANTS

2021-2022	Funding:	\$7,499 (Direct Costs)
	Agency:	Stephen F. Austin President's Innovation Fund
	Title:	DRONES – Drone Research and Outreach in the Natural and Environmental Sciences- President's Innovation Fund
	Role:	PI
2020-2021	Funding:	\$5,700 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	Effects of Anthropogenic Noise on Bottlenose Dolphin Cognition
	Role:	PI
2020-2021	Funding:	\$5,100 (Direct costs)
	Agency:	Dolphin Quest
	Title:	A New Role for Hybrid Cetaceans in the Study of Comparative Cognition
2019-2020	Funding:	\$1,600 (Direct Costs)
	Agency:	Dolphin Quest
	Title:	Visual Perception and the 'Blind Spot' of Bottlenose Dolphins
	Role:	PI

2019-2020	Funding: Agency: Title: Role:	\$9,000 (Direct costs) Oklahoma State University Foundation President's Fellow Fund Digitization of the OSU Collection of Vertebrates for Use in Education, Outreach and Research Co-PI (with Prof. Donald French, OSU/Prof. Karen McBee, OSU)
2019-2021	Funding: Agency: Title: Role:	\$438,000 Oklahoma State University College of Arts and Sciences Renovation Grant Creation of a Marine Laboratory Co-PI (with Prof. Donald French, OSU)
2015-2017	Funding: Agency: Title: Role:	\$214,000 (Total) European Union: Horizon 2020 Marie Skłodowska-Curie Individual Fellowships Cetacean Use of Representational Acoustic Signals Fellow/Co-PI (with Prof. Vincent Janik)
2012-2013	Funding: Agency: Title: Role:	\$2,500 (Direct Costs) University of Chicago: Gianinno Dissertation Year Fellowship Long-Term Social Recognition and Signal Meaning in Tursiops PI
2012-2013	Funding: Agency: Title: Role:	\$2,500 (Direct Costs) University of Chicago: Ryerson Grant Long-Term Social Recognition and Signal Meaning in Tursiops PI
2009-2010	Funding: Agency: Title: Role:	\$2,000 (Direct Costs) University of Chicago: Janco Research Travel Grant Long-Term Social Recognition and Signal Meaning in Tursiops PI
2008-2009	Funding: Agency: Title: Role:	\$3,000 (Direct Costs) University of Chicago: Provost Summer Fellowship Long-Term Social Recognition and Signal Meaning in Tursiops PI
2008-2009	Funding: Agency: Title: Role:	\$8,000 (Direct Costs) University of Chicago: Ryerson Grant Long-Term Social Recognition and Signal Meaning in Tursiops PI

2007-2008 Funding: \$2,000 (Direct Costs)
Agency: University of Chicago: Hinds Fellowship
Title: Long-Term Social Recognition and Signal Meaning in Tursiops
Role: PI

PUBLICATIONS:

Peer-Reviewed Publications and Edited Chapters

- 2024 BRUCK, J.N. "The Cetacean Sanctuary: A Sea of Unknowns" Invited Manuscript to the journal *Animals*. Special Issue on Zoo and Aquarium Welfare, Ethics, Behavior 14(2):335. <https://doi.org/10.3390/ani14020335>.
- 2023 Stevens, P.E., Allen, V. and BRUCK, J.N. A Quieter Ocean: Experimentally derived differences in attentive responses of *Tursiops truncatus* to anthropogenic noise playbacks before and during the COVID-19 related anthropause, Invited Manuscript to the journal *Animals*. Special Issue on Effects of Noise and Light on Marine Fauna and Environment. 11(11):3312. <https://doi.org/10.3390/ani11113312>
- 2023 BRUCK, J.N. A Deeper Understanding of Noise Effects on Cetaceans, Invited Manuscript to the journal *Learning and Behavior*. <https://doi.org/10.3758/s13420-023-00585-1>
- 2022 BRUCK, J. N. and Pack, A. Understanding Across the Senses: Cross-modal Studies of Cognition in Cetaceans. Invited Manuscript to the journal *Animal Cognition*. Special Issue on Cognition in Marine Mammals: The Strength of Flexibility in Adapting to Marine Life. 25, 1059–1075. <https://doi.org/10.1007/s10071-022-01684-8>
- 2022 BRUCK, J.N. Walmsey, S. and Janik, V.M. Cross-modal perception of identity by sound and taste in bottlenose dolphins, *Science Advances*, 8(20) DOI: 10.1126/sciadv.abm7684
- 2021 Stevens, P.E., Hill, H. and BRUCK, J.N. Cetacean Acoustic Welfare in Wild and Zoological Settings: The Gaps and the Opportunities, Invited Manuscript to the journal *Animals*. Special Issue on Cetacean Welfare in the Wild and in Human Care. 11(11):3312. <https://doi.org/10.3390/ani11113312>
- 2020 Jaakkola, K., BRUCK, JN; Connor, R.; Montgomery, S.; King, SL. (2020) Bias and Misrepresentation of Science Undermines Productive Discourse on Animal Welfare Policy: A Case Study. *Animals* 10(7):1118.
- 2020 BRUCK J.N. and Gunnars, T. Visual Perception. In: Vonk J., Shackelford T. (eds) *Encyclopedia of Animal Cognition and Behavior*. Springer, Cham.
- 2019 BRUCK, J.N. (2019) Long-term Memory. In: Vonk J., Shackelford T. (eds) *Encyclopedia of Animal Cognition and Behavior*. Springer, Cham.

- 2019 BRUCK J.N. and Stevens, P. (2019) Sensitization. In: Vonk J., Shackelford T. (eds) *Encyclopedia of Animal Cognition and Behavior*. Springer, Cham.
- 2019 BRUCK J.N. and Bruck, J. R. (2019) Day/Night Cycle. In: Vonk J., Shackelford T. (eds) *Encyclopedia of Animal Cognition and Behavior*. Springer, Cham.
- 2019 BRUCK J.N. (2019) Chemical Signals. In: Vonk J., Shackelford T. (eds) *Encyclopedia of Animal Cognition and Behavior*. Springer, Cham.
- 2018 BRUCK J.N. (2018) Dead Reckoning. In: Vonk J., Shackelford T. (eds) *Encyclopedia of Animal Cognition and Behavior*. Springer, Cham.
- 2017 BRUCK, J. N., Allen, N., Brass, K., Horn, B. & Campbell, P. (2017). Species Differences in Mouse (genus, *Mus*) Egocentric Navigation: The Effect of Burrowing Ecology on a Spatial-cognitive Trait. *Animal Behaviour*. 127, 67-73
- 2017 Stewart, J., Moore, M. E., Forshee, J. L., Boyles, K., Harmon, M. G., BRUCK, J. N. & French, D. P. (2017). 3D-printed fish models for testing guppy mate choice. *Tested Studies for Laboratory Teaching: Proceedings for the 39th Workshop/Conference of the Association for Biology Laboratory Education (ABLE), June 13-16, 2017*. McMahon, K. (ed.). USA: Association for Biology Laboratory Education, Vol. 38, 1-19
- 2015 BRUCK, J.N. (2015). The Use of Acoustic Playbacks with Captive Cetaceans, *The Journal of Acoustical Society of America*, 137 (4), 2396 (conference publication)
- 2013 BRUCK, J. N. (2013). Decades Long Social Memory in Bottlenose Dolphins, *Proceedings of the Royal Society of London B*, 280 (1768)
- 2010 BRUCK, J. N. & Mateo, J. (2010). How Habitat Features Shape Ground Squirrel Navigation. *Journal of Comparative Psychology*. 124, 176-186

In Preparation

BRUCK, J.N., Gaeta, R., Jacob, J., O'Brien, H. Cranial CT scan of Juvenile Bottlenose Dolphin, to be submitted to *Scientific Data*

BRUCK, J.N., Hill, D.D. and Taft, B. Kin-recognition in bottlenose dolphins, to be submitted to *Proceedings of the Royal Society B*

Gunnars, T., Milner, R., Barnes, M., Walker, K., Abramson, C., & BRUCK, J. N. The Visual Field of the Bottlenose Dolphin (*Tursiops truncatus*). Manuscript in Prep for *Aquatic Mammals*.

BRUCK, J. N., Allen, A., Damiano S., Smith A., Pacini, A., Jacob J. E., Fahlman, A., Vivier, F. Shorter, K.A. and Bejder, L. Cetaceans Under Managed-Care as a Resource for Conservation Technology Development. Invited Manuscript as part of Special Issue on Contributions of Zoos and Aquariums to the Advancement of Marine Science for the journal *Frontiers in Marine Science*.

Gaeta, R., Jacob, J., and BRUCK, J.N. Particle Image Velocimetry of Bottlenose Dolphin Blowhole Excretion, to be submitted to *Fluid Dynamics*

BRUCK, J.N., Damiano, S., Gaeta, R., and Jacob, J. Bottlenose Dolphin Perception of Silent Unmanned Aerial Systems, to be submitted to *Journal of the Acoustical Society of America*

Selected Web-based Publications

2022 BRUCK, J.N. Dolphins use signature whistles to represent other dolphins – similarly to how humans use names. *The Conversation*. <https://theconversation.com/dolphins-use-signature-whistles-to-represent-other-dolphins-similarly-to-how-humans-use-names-188332>

2020 BRUCK, JN. With the help of trained dolphins, our team of researchers is building a specialized drone to help us study dolphins in the wild. *The Conversation* <https://theconversation.com/with-the-help-of-trained-dolphins-our-team-of-researchers-is-building-a-specialized-drone-to-help-us-study-dolphins-in-the-wild-137971>

2018 BRUCK, J.N. Grief In Animals: Does An Orca Have To Be A Human With Fins For Us To Care? <http://awesomeocean.com/top-stories/grief-animals-orca-human-fins-us-care/>

REFEREE

European Commission Horizon Individual Fellowship 2020, 2021 and 2022 Grants, Bioacoustics, Animal Behavior and Cognition, Zoo Biology, *Frontiers | Ecology and Evolution*, *PLOS ONE*, *Scientific Reports*, *Aquatic Mammals*, *Behavioral Ecology*, *Behavioral Ecology and Sociobiology*, *Communications Biology*, University of Chicago Press and *Nature*.

SELECTED RECENT PRESENTATIONS

2023 Conservation-focused Research in a Zoological Setting. Alliance of Marine Mammal Parks and Aquariums Annual Meeting. (Invited Talk). J. Bruck.

2023 Dolphins, Drones and Urine: A Meandering Journey Studying One of the World's Coolest Animals. Dolphin Communication Project Seminar Series (Online Invited Talk). J. Bruck

2023 Dolphin attentive responses to anthropogenic noise stimuli before and during the COVID-19 anthropause. 2023 Animal Behavior Society Meeting; Portland Oregon (Talk). P. Stevens and J. Bruck

- 2022 Operating Without a Net: Using Drones and Other Technologies to Give Students Authentic Course-Based Undergraduate Research Experiences (CUREs). Four-year Section Award Winner Lecture. National Association of Biology Teachers Meeting. Indianapolis, IN (Talk). J. Bruck
- 2022 Training for Research in Cognition, Psychophysics and Sensory Biology. 4th Annual Online Animal Training Seminar. Animal Concepts. (Invited Talk) J. Bruck
- 2022 Social Signaling in Bottlenose Dolphins. Eckerd College. Animal Studies Seminar (Invited Talk). J. Bruck
- 2022 Dolphins, Drones and Urine: A Meandering Journey Studying One of the World's Coolest Animals. Texas A&M – San Antonio. Biology Research Seminar (Invited Talk). J. Bruck
- 2022 The Visual Field of the Bottlenose Dolphin (*Tursiops truncatus*) 24nd Biennial Conference on The Biology of Marine Mammals; Palm Beach, Florida (Talk). T. Gunnars, R. Milner, M. Barnes, K. Walker, C. Abramson and J. Bruck
- 2022 Kin Recognition in Bottlenose Dolphins. 24nd Biennial Conference on The Biology of Marine Mammals; Palm Beach, Florida (Talk). J. Bruck, D. Hill, R. Hamrock, and B. Taft
- 2022 Blowfield Sampling of Small Toothed Whales with Unmanned Autonomous Aircraft. 24nd Biennial Conference on The Biology of Marine Mammals; Palm Beach, Florida (Video). J. Bruck and J. Jacob.
- 2022 Which Drone Should You Buy to Study Dolphins?: The Use of Drones to Assess Dolphin Response Behavior at Various Heights With Commonly Used Platforms. 24nd Biennial Conference on The Biology of Marine Mammals; Palm Beach, Florida (Poster). S. Damiano and J. Bruck.
- 2022 Experimental Science in Wild and Captive Marine Mammals. 24nd Biennial Conference on The Biology of Marine Mammals; Palm Beach, Florida (Workshop organizer). J. Bruck and A. Allen.
- 2022 Overcoming the Challenges of Blow-Sampling with UAS in Small Cetaceans. International Association for Aquatic Animal Medicine meeting. (Talk). J. Bruck, S. Damiano and J. Jacob
- 2022 Acoustic Welfare with Cetaceans Under Human Care. Alliance of Marine Mammal Parks and Aquariums; SeaWorld Orlando Fl. (Invited Talk). J. Bruck
- 2022 Welfare of Cetaceans Under Human Care. International Marine Animal Training Association Meeting. Chicago, IL. (Invited Panelist). J. Bruck

- 2022 Operating Without a Net: Using Drones and Other Technologies to Give Students Authentic Course-Based Undergraduate Research Experiences (CUREs). Marjorie Gardner Lecture, Society for College Science Teachers National Meeting, Houston, TX (Talk). J. Bruck.
- 2021 Integrating Zoos and Researchers: Making an Impact on Science and Guests. The European Association for Aquatic Mammals Conference. March 11th-13th. Virtual. (Talk)
- 2019 Two-Phase Computational Fluid Dynamics Simulations of Dolphin Blowhole Expulsion Jets. 72nd Annual Meeting of American Physical Society Division of Fluid Dynamics Conference; Seattle, Washington. (Talk)
- 2019 Quantitative Electrophysiology with Invertebrates: A Student-led, Goal-directed Lab to Drive Problem-solving and Simulate Authentic Research. National Association of Biology Teachers Conference; Chicago, IL. (Demonstration)
- 2019 Identification of Conspecifics using Chemosensory Signals in Bottlenose Dolphins. International Marine Animal Trainers' Association/Association of Zoological & Aquariums Conference; New Orleans, LA. (Poster- 1st Place).
- 2019 A Comparative Evolutionary Framework for Understanding Long-term Memory. FOSSIL (FlyOver State Scientists Integrating EvoLution) Conference; Stillwater OK. (Talk)
- 2019 Noise and Cognition: A Deeper Look into Anthropogenic Effects on Marine Mammals. FOSSIL (FlyOver State Scientists Integrating EvoLution) Conference; Stillwater OK. (Talk). P Stevens, M Tryzbiak, E West, and J Bruck.
- 2019 Noise and Cognition: A Deeper Look into Anthropogenic Effects on Marine Mammals. Conference on Comparative Cognition; Marathon, FL. (Poster). P Stevens, M Tryzbiak, E West, and J Bruck.
- 2018 Experimental Simulation of Dolphin Blow. Bulletin of the American Physical Society; Atlanta, GA. (Presentation). R Gaeta, J Bruck, and J Jacob.
- 2018 Research with dolphins under human care. Alliance of Marine Mammal Parks and Aquariums. Washington, DC. (Invited talk). J Bruck.
- 2017 Experimental Methods in Wild and Captive Marine Mammals. 22nd Biennial Conference on The Biology of Marine Mammals; Halifax Canada. (Workshop Facilitator)
- 2017 Chemical Social Recognition in Bottlenose Dolphins. 22nd Biennial Conference on The Biology of Marine Mammals; Halifax, Canada (Talk). J. Bruck

- 2016 Complex Signals in Bottlenose Dolphins. Workshop on Signal Complexity, University of Zürich; Zürich Switzerland (Invited talk). J. Bruck
- 2015 The Use of Acoustic Playbacks with Captive Cetaceans. 169th Meeting of the Acoustical Society of America; Pittsburgh PA (Invited talk). J. Bruck

AWARDS

- 2022 Society of College Science Teachers (SCST) Outstanding Undergraduate Science Teacher Award (OUSTA).
- 2021 National Association of Biology Teachers (NABT) Four-Year College & University Section Biology Teaching Award for Excellence in Biology Instruction.
- 2019 Course Hero/Woodrow Wilson Fellowship for Excellence in Teaching.

MENTEES/ADVISEES

Current Graduate Students

- | | | |
|--------------|--------------------------|--|
| 2023-Present | M.S. Advisor | M. Schoenhof, SFA State University
Beluga vocal repertoire and experimental responses to acoustic playbacks |
| 2019-Present | Ph.D. Advisor | P. Stevens, Oklahoma State University
Anthropogenic noise and cognition in cetaceans |
| 2019-Present | Ph.D. Advisor | R. Hamrock, Oklahoma State University
Vocal learning in hybrid cetaceans |
| 2023-Present | Member of M.S. Committee | D. Soto, SFA State University
Survey of Ticks Collected in East Texas. |
| 2023-Present | Member of M.S. Committee | C. McClellan, SFA State University
Molecular focused thesis-TBD. |

Current Undergraduate Students

- | | | |
|--------------|--------------------------------|--|
| 2023-Present | Undergraduate Research Advisor | J. Cummings, SFA State University
Mouse Olfactory Kin Recognition & Dolphin kin recognition |
| 2023-Present | Undergraduate Research Advisor | M. Crandall, SFA State University
Mouse Olfactory Kin Recognition & Dolphin kin recognition |
| 2023-Present | Undergraduate Research Advisor | A. Griffin, SFA State University
Mouse Olfactory Kin Recognition |
| 2023-Present | Undergraduate Research Advisor | E. Rodriguez, SFA State University
Dolphin kin recognition |

2023-Present	Undergraduate Research Advisor Mouse Olfactory Kin Recognition	L. Hetrick, SFA State University
2023-Present	Undergraduate Research Advisor Mouse Olfactory Kin Recognition	L. Cooper, SFA State University
2023-Present	Undergraduate Research Advisor Mouse Olfactory Kin Recognition	M. Aquino, SFA State University
2023-Present	Undergraduate Research Advisor Mouse Olfactory Kin Recognition	T. Hayes, SFA State University
2023-Present	Undergraduate Research Advisor Beluga vocal repertoire	J. Hobson, SFA State University
2023-Present	Undergraduate Research Advisor Mouse Olfactory Kin Recognition	A. Griffin, SFA State University
2022-Present	Undergraduate Research Advisor Meta-analysis of the Contribution of Zoos to the Broader Cetacean Literature	J. Boykin, SFA State University
2022-Present	Undergraduate Research Advisor Meta-analysis of the Contribution of Zoos to the Broader Cetacean Literature	M. Gonzalez, SFA State University
2022-Present	Undergraduate Research Advisor Meta-analysis of the Contribution of Zoos to the Broader Cetacean Literature, Beluga vocal repertoire and Dolphin kin recognition	N. Peters, SFA State University
2022-Present	Undergraduate Research Advisor The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i> , Meta- analysis of the Contribution of Zoos to the Broader Cetacean Literature and the Anthropogenic Effects on Cetacean Cognition	C. Lynn, SFA State University
2021-Present	Undergraduate Research Advisor The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>	K. Pate, SFA State University
2021-Present	Undergraduate Research Advisor The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i> and Mouse Olfactory Kin Recognition	H. Lederman, SFA State University

Past Graduate Students

2023-2023	Member of M.S. Committee Mechanisms of Parkinson's Disease. In process	C. Wallace, SFA State University
-----------	---	----------------------------------

2021-2023	M.S. Advisor	S. Damiano, SFA State University Dolphin Behavioral Responses to Uncrewed Aerial Systems as a Function of Type, Height and Exposure. Graduated
2022- 2023	Member of M.S. Committee	H. Standifird, SFA State University Molecular Detection and Characterization of <i>Rickettsia</i> sp. in Hard Ticks Collected in East Texas. Graduated
2018-2022	Member of Ph.D. Committee	A. Leone, Oklahoma State University Development of biological instruction (genetics focus) at the university level. Graduated
2018-2020	M.S. Advisor	T. Gunnars, Oklahoma State University Visual perception in bottlenose dolphins. Graduated
2019-2020	Member of M.S. Committee	J.C. Locke, Oklahoma State University Educational outcomes for students in rural communities. Graduated
2019-2020	Member of M.S. Committee	C.J. Barton, Oklahoma State University Development of dolphin blowhole simulator. Graduated

Past Undergraduate Students

2023-2023	Undergraduate Research Advisor	K. Alexander, SFA State University Mouse Olfactory Kin Recognition
2022-2023	Undergraduate Research Advisor	K. Jobe, SFA State University Meta-analysis of the Contribution of Zoos to the Broader Cetacean Literature
2022-2023	Undergraduate Research Advisor	K. Hill, SFA State University Meta-analysis of the Contribution of Zoos to the Broader Cetacean Literature
2022-2023	Undergraduate Research Advisor	K. Priddy, SFA State University A Quieter Ocean: Experimentally derived differences in attentive responses of <i>Tursiops truncatus</i> to anthropogenic noise playbacks before and during the COVID-19 related anthropause
2021-2023	Undergraduate Research Advisor	R. Kelly, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2021-2023	Undergraduate Research Advisor	C. Wilson, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i> and Meta-analysis of the Contribution of Zoos to the Broader Cetacean Literature
2021-2023	Undergraduate Research Advisor	T. Coleman, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>

- 2021-2023 Undergraduate Research Advisor R. Eaton, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus*
- 2021-2023 Undergraduate Research Advisor S. Madkins, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus*
- 2021-2023 Undergraduate Research Advisor D. Newbury, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus* and Meta-analysis of the Contribution of Zoos to the Broader Cetacean Literature
- 2021-2023 Undergraduate Research Advisor Z. Nguyen, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus*
- 2021-2023 Undergraduate Research Advisor D. Servingalindo, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus*
- 2021-2023 Undergraduate Research Advisor M. Lollar, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus*
- 2021-2023 Undergraduate Research Advisor E. Quinlivan, SFA State University
Kin recognition in animals and Dolphin Bioacoustics During Captive Dolphin Interactions
- 2021-2023 Undergraduate Research Advisor V. Allen, SFA State University
A Quieter Ocean: Experimentally derived differences in attentive responses of *Tursiops truncatus* to anthropogenic noise playbacks before and during the COVID-19 related anthropause
- 2021-2023 Undergraduate Research Advisor S. Madlock, SFA State University
Dolphin Bioacoustics During Captive Dolphin Interactions
- 2021-2023 Undergraduate Research Advisor R. Latham, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus*
- 2021-2023 Undergraduate Research Advisor J. West, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus*
- 2021-2023 Undergraduate Research Advisor A. Contreras, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus* and Meta-analysis of the Contribution of Zoos to the Broader Cetacean Literature
- 2020-2021 Undergraduate Research Advisor M. Taylor, SFA State University
The effects of sex and relatedness on cooperation in *Mus spicilegus*

2020-2021	Undergraduate Research Advisor	L. McMillen, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2020-2021	Undergraduate Research Advisor	C. Ramirez, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2020-2021	Undergraduate Research Advisor	B. Jones, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2020-2021	Undergraduate Research Advisor	B. Kinney, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2020-2021	Undergraduate Research Advisor	K. Thompson, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2020-2021	Undergraduate Research Advisor	P. Weiblinger, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2020-2021	Undergraduate Research Advisor	A. Hamanaka, SFA State University The effects of anthropogenic noise on cetacean cognition
2020-2021	Undergraduate Research Advisor	C. Rodriguez, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2020-2021	Undergraduate Research Advisor	M. Chatham, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2020-2021	Undergraduate Research Advisor	A. Truong, SFA State University The effects of sex and relatedness on cooperation in <i>Mus spicilegus</i>
2018-2020	Undergraduate Research Advisor	M. Tryzbiak, Oklahoma State University Anthropogenic noise and attention in cetaceans HHMI Life Science Freshman Research Scholar, Independent Study
2018-2020	Undergraduate Research Advisor	E.B. West, Oklahoma State University Anthropogenic noise and attention in cetaceans HHMI Life Science Freshman Research Scholar, Independent Study
2018-2020	Undergraduate Research Advisor	E. West, Oklahoma State University <i>Mus spicilegus</i> social tunnel building. HHMI Life Science Freshman Research Scholar, Independent Study
2018-2020	Undergraduate Research Advisor	K. Davis, Oklahoma State University Dolphin non-signature whistles. HHMI Life Science Freshman Research Scholar, Independent Study

2018-2020	Undergraduate Research Advisor Dolphin non-signature whistles HHMI Life Science Freshman Research Scholar, Independent Study	L. Clark, Oklahoma State University
2018-2019	Chair of Honors Committee Project related to Anthropogenic noise and attention in cetaceans. Graduated	P. Stevens, Oklahoma State University
2017-2019	Undergraduate Research Advisor Dolphin chemoreception, Independent Study	S. Sheppard, Oklahoma State University
2017-2018	Undergraduate Research Advisor Project related to dolphin chemoreception, Independent Study.	S. Starr, Oklahoma State University
2016-2017	Co-Supervised honours thesis. Categorising Non-Signature Whistles of Bottlenose Dolphins (<i>Tursiops truncatus</i>): The Rook and the Up-down	C. Raine, University of St Andrews
2015-2016	Supervised BS project All in the Family: Bottlenose Dolphin Kin Recognition Using Signature Whistles. HHMI Life Science Freshman Research Scholar, Independent Study	M. Pearce, Oklahoma State University
2015-2015	Supervised BS project Eighteen Blind Mice: Species Level Differences in Path Integration Between <i>Mus spicilegus</i> and <i>Mus musculus</i> .	N. Allen, Oklahoma State University
2015-2015	Supervised BS project. Mechanisms of Kin Recognition in Cetaceans	B. Horn, Oklahoma State University

RESEARCH APPOINTMENTS

2020-Present Assistant Professor

Stephen F. Austin State University Nacogdoches, TX

- Published in seven manuscripts in four years in *Science Advances*, *Animals*, and *Animal Cognition*
- Awarded over 300,000 in internal and external grant funding over the first 4 years of appointment.

2017-2020 Curatorial Associate/Acting Curator of The Collection of Vertebrates

Oklahoma State University Stillwater OK

- Co-awarded \$9,000 Tech Grant to develop scanning of collection materials.

2015-2017 Marie Curie Research Fellow

University of St. Andrews Scotland UK

- Supervised MSc Level students on independent projects.
- Obtained \$214,000 in EU funding.

2014-2015 Visiting Assistant Professor of Integrative Biology

Oklahoma State University Stillwater OK

- Published research with three undergraduates in the Journal *Animal Behaviour*.

2004-2014 Research Fellow

Institute for Mind and Biology Chicago IL

University of Chicago

- Awarded \$27,000 in grants for Masters and Ph.D. research
- Published research that discovered the longest known non-human animal memory yet discovered in *Proceedings of the Royal Society of London B*.

2003-2004 Research Assistant

Institute for Mind and Biology Chicago IL

University of Chicago

- Developed independent research that was later published in the *Journal of Comparative Psychology*.

TEACHING APPOINTMENTS

2020-Present Assistant Professor

Stephen F. Austin State University Nacogdoches, TX

- Named 2021 NABT Four-Year College & University Biology Teaching Award recipient and the 2022 OUSTA recipient for innovations in biology instruction
- Developed laboratory-based Physiology and Marine Biology courses
- Developed Mammalogy course featuring bioacoustics, drone conservation and genomics labs
- Developed new Aquatic Biology (Freshwater and Marine) concentration in the Biology Department

2017-2020 Teaching Assistant Professor of Integrative Biology

Oklahoma State University Stillwater OK

- Nominated for Arts & Sciences Distinguished Teaching Award
- Co-awarded \$438,000 infrastructure grant to build teaching marine research lab
- Co-awarded \$5,000 instructional grant to teach Honors course on The Mind
- Instructed over 300 upper-level undergraduate students in human physiology course
- Implemented a new osmolarity lab focusing on real world applications in medicine related to traumatic brain injury and diabetes
- Developed multiple new inquiry based labs for Invertebrate Zoology
- Instructed 300 introductory biology students and had among the highest class average of the seven course sections with a 4.8 out of 5.0 teaching evaluation score from the students

2015-2017 Guest Lecturer; School of Biology

University of St. Andrews St. Andrews, UK,

- Lectured on dolphin communication, cognition and social ecology for Animal Communication and Cognition course
- Assessed and graded student writing and projects
- Led and facilitated student discussion groups
- Received University level training in British Undergraduate Degree Classification System through professional development courses

2014-2015 Visiting Assistant Professor of Zoology

Oklahoma State University Stillwater OK

- Instructed over 70 upper-level undergraduate students in capstone evolution course focusing on genetic and epigenetic mechanisms of phenotypic variation
- Cooperatively implemented new live animal labs in concert with intro biology course, organized field fish sample collection and supervised independent student research projects in fish biology, behavior, anatomy, ecology and physiology
- Co-authored a workshop on a new fish sexual selection lab using 3D printed fish models at Association for Biology Laboratory Education Meeting 2016
- Supervised and co-authored published manuscript with OSU faculty and two fourth-year undergraduate independent-study students on mice egocentric spatial navigation
- Supervised undergraduate student on her first place project involving dolphin communication at Howard Hughes Medical Institute Freshman Scholar Research Competition
- Developed ecology and environmental biology instruction for second and third year students
- Completed faculty development workshop on student writing and assessment
- Participated in the development of university level writing assessment standards for Provost's Initiative on General Education

COURSES TAUGHT

- Marine Biology (Lecture- 20 upper level undergrads)
- Mammalogy (Lecture and Lab- 40 upper level undergrads or grad students)
- Animal Physiology (Lecture and Lab- 40 upper level undergrads)
- Introductory Biology (Lecture/Lab – 100-120 Freshman students)
- Invertebrate Zoology (Lecture/Lab – 40 upper level undergraduate students)
- The Mind (Seminar – 20 Freshman Honors students)
- Mammalian Physiology (Lab – 25 upper level undergraduate students)
- Physiology (Lecture/lab – 300 undergraduate students)
- Cognition, Evolution, and Behavior (Graduate Seminar – 15 graduate students)
- Environmental Biology (Lecture – 40 undergraduate students)
- Evolution (Lecture – 150 undergraduate students)
- Biology of Fishes (Lecture/Lab – 20 upper level undergraduate students)
- Ecology (Lecture/lab – 150 undergraduate students)
- Experimental Animal Learning (Lecture/Lab – 20 students)

- Animal behavior TA (Lecture/Lab – 200 undergraduate students)
- The Mind TA (Seminar – 15 students)

SELECTED PROFESSIONAL SERVICE

2023-Present	Member at large Society for College Science Teachers
2023-Present	Chair, Faculty Senate Policy Committee Stephen F. Austin State University
2023-Present	President and Board Member Marine Mammal Research Network
2023-Present	Member, Animal Welfare Committee Alliance of Marine Mammal Parks and Aquariums
2022-Present	Senator, Faculty Senate Stephen F Austin State University
2022-Present	Member, College Council Stephen F Austin State University
2022-Present	Editorial Board Learning and Behavior
2022-Present	Editorial Board Journal of Animal Behavior and Cognition
2022-Present	Editorial Board International Journal of Comparative Psychology
2022-2023	Member, University Policy Committee Stephen F Austin State University
2021-2022	Editorial Board Journal of Animal Behavior and Cognition
2020-Present	Member, Department of Biology Institutional Animal Care and Use Committee, SFASU
2018-2020	Member, Integrative Biology Undergraduate Education Committee Oklahoma State University
2017-2021	Editorial Board Member Journal of Animal Behavior and Cognition
2016-2017	Contract Research Staff Representative to Biology Faculty University of St. Andrews
2005-2013	Point Person, Human Development Student Association University of Chicago

SELECTED OUTREACH-TALKS, LECTURES AND JUDGING

2017-2021	Multiple podcast appearances on Zoologic, the Not a Dolphin podcast and the SciComm Podcast
2017/2022	Workshop Coordinator Conference on The Biology of Marine Mammals Halifax, Canada
2017	Science Discovery Day Demonstration University of St. Andrews, St. Andrews, U.K.
2016-2017	U.K. STEM Ambassador
2015	Judge Oklahoma Louis Stamps Alliance for Minority Participation

2013 Guest Lecture
Otterbein University; Westerville, OH

2013 Staff Lecture
Brookfield Zoo, Brookfield, IL

2011 Staff Lecture
Walt Disney World Animal Programs: Orlando, FL

PROFESSIONAL MEMBERSHIPS

Alliance of Marine Mammal Parks and Aquariums: Science Member
Animal Behavior Society
Marine Mammal Research Network
Society for Marine Mammalogy
Psi Chi: National Honor Society
OCEAN: Oklahoma Center for Evolutionary Analysis
Association for Biology Laboratory Education (ABLE)
National Association for Biology Teachers (NABT)
Society of College Science Teachers (SCST)