# RENE P. MARTIN

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## **EDUCATION**

**Ph.D.** Ecology and Evolutionary Biology – December 2022 University of Kansas, Lawrence, KS

Master of Science Biological Sciences – May 2017 St. Cloud State University, St. Cloud, MN

Bachelor of Science Ecology and Field Biology – December 2014

Concentration: Ecology and Natural Resources St. Cloud State University, St. Cloud, MN

Associate of Arts Liberal Arts and Sciences – May 2012 Century College, White Bear Lake, MN

PROFESSIONAL EXPERIENCE	
Academic —	
2024-Present	<b>Assistant Professor (Fish Biologist)</b> — School of Natural Resources at the Institute of Agriculture and Natural Resources, University of Nebraska - Lincoln. Lincoln, Nebraska.
2023–2024	Postdoctoral Researcher (Gerstner Scholar) — Research on the morphology and evolution of light organs in lanternfishes, tubeshoulders, and ponyfishes. American Museum of Natural History, New York, New York. Supervisor: John Sparks.
2022	Research Assistant (Ornithology) — Cutting, digesting, and extracting of DNA from Cryogenically-stored tissues in the University of Kansas Natural History Museum and Biodiversity Institute Ornithology Collection. Work also included library preparation of samples for whole genome Illumina sequencing. University of Kansas, Lawrence, Kansas. Supervisor: Robert Moyle
2021	Curatorial Assistant (Ichthyology) — Curating the tissue collection, identifying and imaging of wet collection specimens, databasing, leading tours of the collections, assessing of lid integrity and alcohol level in the University of Kansas Natural History Museum and Biodiversity Institute Ichthyology Collection. University of Kansas, Lawrence, Kansas. Supervisors: Wm. Leo Smith, Andy Bentley
2020–2021	Curatorial/Research Assistant (Invertebrate Paleontology) — Digitizing of trilobite specimens for the University of Kansas Natural History Museum and Biodiversity Institute Invertebrate Paleontology Collection. Work also included analyzing trilobites using geometric morphometrics. University of Kansas, Lawrence, Kansas. Supervisors: Bruce Lieberman, Natalia Lopez Carranza
2017–2018	University Graduate Fellowship — Studying the macroevolution of lanternfishes using geometric morphometrics and phylogenetic comparative methods. University of Kansas, Lawrence, Kansas.
2015–2017	Research Assistant — Studying the evolution of deep-sea fishes for NSF deep-sea grant (DEB 1258141, 1543654). St. Cloud State University, St. Cloud, Minnesota. Supervisor: Matt Davis
2013–2014	<b>Undergraduate Researcher</b> — Studying the mate-choice copying reproductive behaviors of wild-caught and aquarium-bred Sailfin mollies. St. Cloud State University, St. Cloud, Minnesota. Supervisor: Shelly Elfelt

State —	
2019	Fisheries Assistant (Kansas Department of Wildlife, Parks, and Tourism: Fisheries Division) — Electrofishing, juglining, seining, trapnetting, lake stocking, fish weighing, measuring, and macrophyte surveying. Work also included fish feeder and boat trailer maintenance, and public education. Perry Lake, Kansas. Supervisor: Nick Kramer
2014	Fisheries Management Intern (Minnesota Department of Natural Resources: Fisheries Division) — Electrofishing, gillnetting, seining, trapnetting, fish weighing, measuring, and removing of otolith and scales. Work also included species identification, database entry, report writing, and trailer and net maintenance. Glenwood, Minnesota. Supervisor: Jerry Wendlandt
2007	Watercraft Inspector Intern (Department of Natural Resources) — Inspecting of watercraft for invasive species at multiple public lake access points. St. Paul, Minnesota.
Other —	
2015–2017	Freshwater Fish Research Scientist (Xcel Energy) — Identifying larval and juvenile fishes of the Mississippi River in Minnesota aiding in ecosystem impact assessments of water intake from coal plants. St. Cloud, Minnesota. Supervisor: Matt Davis
TEACHING	EXPERIENCE
Instructor —	
2024-2025	Vertebrate Zoology (NRES/BIOS 386), Comparative biology of vertebrates, emphasizing morphology, evolution, ecology and behavior. 4 credits. Course explores the diversity, evolution, adaptations, and ecology of vertebrates. Responsibility 100%. Enrolled Students: 80
	Marine Ecology in the Bahamas (NRES 492), International Study Tours in Natural Resources Management through the University of Nebraska-Lincoln, co-lead students during a study abroad trip to the Bimini Shark Lab, Bimini, Bahamas. Two Faculty; Responsibility 50%. Co-instructor: Lindsey Chizinski. Enrolled Students: 14
2023-2024	Marine Ecology in the Bahamas (NRES 492), International Study Tours in Natural Resources Management through the University of Nebraska-Lincoln, co-lead students during a study abroad trip to the Bimini Shark Lab, Bimini, Bahamas. Two Faculty; Responsibility 50%. Co-instructor: Lindsey Chizinski. Enrolled Students: 14
2023	Histological Techniques: Platytroctidae Structures, Histological methods, from embedding to sectioning to staining and analysis. Sumer course, Richard Gilder Graduate School, American Museum of Natural History, New York, New York.
2020	<b>Evolutionary Biology,</b> Upward Bound UNITE, six week summer course, University of Kansas, Lawrence, Kansas.
Invited Lectu	rer / Expert —
2024	'Additional hands on Deck and Expertise' for Fisheries Science Lab (NRES 463/863L), University of Nebraska-Lincoln, Lincoln, Nebraska, October 2024, Instructor: Mark Pegg
	'Research on Deep-sea Fishes and Bioluminescence' for Ichthyology (GU 4112), Columbia University, New York, New York, April 2024, Instructor: Bruno Melo
2021	<b>Evolution in the Deep Sea'</b> for <b>Evolutionary Biology (BIO 385),</b> Gustavus Adolphus College, St. Peter, Minnesota, December 3rd, Instructor: Katie Peterson. Virtual
	'My Dive into Deep-sea Research' for Marine Ichthyology (BIOL 396), Millersville University, Millersville, Pennsylvania, July 13th, Instructor: Isaac Ligocki. Virtual
2020	<b>'Fisheries Sampling Techniques'</b> for <b>Limnology (ESCI 230),</b> Peru State College, Peru, Nebraska, October 15th, Instructor: Lucas Klicka. Virtual

	'Importance of Museum Collections' for Museums (NDL 107), Gustavus College, St. Peter, Minnesota, January 21st, Instructor: Katie Peterson. Virtual
2019	<b>'Beyond and R'</b> for <b>An Introduction to R Programming (BIOL 701),</b> University of Kansas, Lawrence, Kansas, November 14th, Instructor: Jamie Walters
2018	'Crash Course in Adobe Illustrator' for STEM Professional Development (BIOL 420), University of Kansas, Lawrence, Kansas, November 10th, Instructor: Karen Olson
	'Coastal Fishes' for Oceanography (GEOL 302), University of Kansas, Lawrence, Kansas, October 9th, Instructor: Eugene Rankey
Teaching As	sistant —
2022	Principles of Biology (BIOL 100), Department of Biology, University of Kansas, Lawrence, Kansas. Supervisors: Trevor Rivers, Kris Holder
	<b>Ichthyology (BIOL 592),</b> Department of Biology, University of Kansas, Lawrence, Kansas. Supervisor: Wm. Leo Smith
	<b>Principles of Biology Lab (BIOL 102),</b> Department of Biology, University of Kansas, Lawrence, Kansas. Supervisor: Laura Rozzi
2020	Principles of Biology (BIOL 100), Department of Biology, University of Kansas, Lawrence, Kansas. Supervisors: Trevor Rivers, Tara Marriage
2019	Introduction to Systematics (BIOL 428), Department of Biology, University of Kansas, Lawrence, Kansas. Supervisors: Kirsten Jensen, Michael Engel
	Principles of Biology (BIOL 100), Department of Biology, University of Kansas, Lawrence, Kansas. Supervisors: Trevor Rivers, Tara Marriage, Kris Holder
2018	<b>Principles of Biology (BIOL 100),</b> Department of Biology, University of Kansas, Lawrence, Kansas. Supervisors: Kris Holder, Tara Marriage
2015–2016	<b>Organismal Diversity (BIOL 152),</b> Department of Biology, St. Cloud State University, St. Cloud, Minnesota. Supervisors: Neal Voelz, Jorge Arriagada
	Ornithology (BIOL 324), Department of Biology, St. Cloud State University, St. Cloud, Minnesota. Supervisor: Marco Restani
2013–2014	Zoology (BIOL 308), Department of Biology, St. Cloud State University, St. Cloud, Minnesota. Supervisor: Anthony Marcattilio

## AWARDS, GRANTS, PROJECTS, AND SCHOLARSHIPS

## Grants (total: \$445,326) —

Main PI. Increased Understanding of Invasive Carp Reproductive Ecology (\$156,296), 'Define the spatial distribution and population demographics of Asian carp species and the associated fish community in the Missouri River Basin,' Nebraska Game and Parks Commission.

- Project ID: UNL-00165554
- CoPIs: Dr. Mark Pegg, Dr. Jonathan Spurgeon.
- Funding Period: January 2025-August 2027

**CoPI.** Invasive Carp Movement and Habitat Use in Nebraska's Interior Rivers (\$277,534), 'Monitor invasive carp movement and habitat use in the Missouri River Basin to inform containment and control management actions,' Nebraska Game and Parks Commission.

- Project ID: UNL-00069152
- Main PI: Dr. Jonathan Spurgeon; CoPI: Dr. Mark Pegg
- Funding Period: January 2025-August 2027

**Panorama Grant (\$1,000),** 'Olfactory Organ Anatomy and Evolution across Deep-sea Lanternfishes,' University of Kansas, Biodiversity Institute

Open Access Grant (\$1,355), Bone Density Variation in Rattails (Macrouridae, Gadiformes): Buoyancy, Depth, Body Size, and Feeding, University of Kansas, Libraries 2021 Lerner-Gray Marine Research Grant (\$2,841), 'Olfaction in Deep-sea Lanternfishes (Myctophidae),' American Museum of Natural History, Richard Gilder Graduate Panorama Grant (\$1,000), 'Understanding the Prevalence of Plastic Ingestion in Coastal 2020 California Lanternfishes (Myctophidae), University of Kansas, Biodiversity Institute AMNH Collection Study Grant (\$900), 'The Role of Phylogeny in the Evolution of Body 2019 Shape of Lanternfishes (Myctophidae),' American Museum of Natural History, Richard Gilder Graduate School Edward C. Raney Grant (\$800), 'Evolution of Variation in Dentition in Deep-sea 2016 Lanternfishes (Teleostei: Myctophiformes),' American Society of Ichthyologists and Herpetologists 2015 Lerner-Gray Marine Research Grant (\$2,500), 'Evolution of Variation in Jaw Shape and Length in Deep-sea Fishes,' American Museum of Natural History, Richard Gilder Graduate School Society of Systematic Biologists Workshop Travel Grant (\$500), The Society of Systematic Biologists Joint Meeting of Ichthyologists and Herpetologists Travel Grant (\$600), American Society of Ichthyologists and Herpetologists **Projects** -**2025** Main PI. Human and Invasive Species Impacts to Nebraska Stream Fishes: An Assessment of Both Invasive and Native Fishes. - Project Type: Hatch - Project ID: 7010668 - Project Dates: October 2025-September 2030 Awards and Funds (total: \$22,787) — 2025 Graduate of the Last Decade (GOLD), St. Cloud State University Alumni Board, St. Cloud State University, St. Cloud, Minnesota 2021 Deep-sea Biology Symposium Online Travel Award (\$200), Deep-Sea Biology CLAS Graduate Scholarly Development Fund (\$500), 'Olfactory Organ Anatomy across Deep-sea Lanternfishes,' University of Kansas, Lawrence, Kansas 2020 Cashner Award (\$1,000), 'A Woman in STEM,' American Society of Ichthyologists and Herpetologists Summer Research Award (\$3,500), 'Olfaction in Deep-sea Lanternfishes (Myctophidae),' University of Kansas, Biodiversity Institute, and Department of Ecology and **Evolutionary Biology** Vice Provost's Graduate Retention Fund (\$500), University of Kansas, Lawrence, Kansas Doctoral Student Research Fund (\$1,500), 'The Historical Presence of Microplastics in Lanternfishes,' University of Kansas, Graduate Studies 2019 Summer Research Award (\$2,000), 'The Historical Presence of Microplastics in Lanternfishes,' University of Kansas, Department of Ecology and Evolutionary Biology 2018 Student Collections Study Award (\$1,250), 'An In-Depth Look at Diets of Lanternfishes (Myctophidae): One of the World's Most Abundant Fish Groups,' Natural History Museum of Los Angeles County

Deep-Sea Grenadiers (Macrouridae), University of Kansas, Graduate Studies Friday Harbor Laboratories Financial Aid (\$1,400), University of Washington Summer Research Award (\$3,000), 'The Role of Phylogeny in the Evolution of Body Shape of Lanternfishes (Myctophiformes), University of Kansas, Department of Ecology and Evolutionary Biology KU Women 4 KU Women (\$500), 'Variations in Bone Density within Deep-Sea Grenadiers (Macrouridae), University of Kansas, The Emily Taylor Center for Women and Gender Equity 2017 The Society of Systematic Biologists Graduate Student Research Award (\$1,300), Phylogenomics of Lanternfishes (Teleostei: Myctophiformes) and the Evolution of Sexually Dimorphic Light Organs, The Society of Systematic Biologists Student Research Fund (\$986), 'Relationships of Lanternfishes: A Phylogenomic Approach Using Ultraconserved Elements (UCEs),' St. Cloud State University, Graduate Studies Student Research Fund (\$726), 'Evolution of Variation in Dentition in Deep-sea 2016 Lanternfishes (Teleostei: Myctophiformes),' St. Cloud State University, Graduate Studies Jerry Wolff Biology Graduate Student Enrichment Fund (\$650), St. Cloud State University George W. Friedrich Wildlife Protection Fund (\$1,000), St. Cloud State University 2015 Jerry Wolff Biology Graduate Student Enrichment Fund (\$1,800), 'Evolution of Jaw Shape and Length Variation in Deep-sea Lanternfishes (Teleostei: Myctophiformes), St. Cloud State University Student Research Fund (\$675), 'Evolution of Variation in Jaw Shape and Length in Deepsea Lanternfishes,' St. Cloud State University, Graduate Studies Scholarships and Fellowships (total: \$182,549) — 2023 Gerstner Scholar Postdoctoral Research Fellowship (\$148,028), 'Blinded by the Light: A Phylogenetic and Morphological Study of Light Organs in Lanternfishes,' American Museum of Natural History, Richard Gilder Graduate School Summer Travel Scholarship (\$250), 'Assessment of Bone Density Reduction within Deep-2019 Sea Grenadiers (Macrouridae), University of Kansas, Ecology and Evolutionary Biology Graduate Student Organization 2017 University Graduate Fellowship (\$28,621), University of Kansas, Graduate Studies Ida Hyde Scholarship (\$2,000), 'Friday Harbor Fish Biomechanics Course,' University of Kansas, Department of Undergraduate Biology Charles Rehwaldt Endowment for the Biological Sciences (\$300), St. Cloud State 2016 University 2014 Harold & Gladys Hopkins Endowed Scholarship (\$1,000), St. Cloud StateUniversity Al Grewe Memorial Scholarship (\$750), St. Cloud State University St. Cloud State Scholarship (\$600), St. Cloud State University 2013 Harold & Gladys Hopkins Endowed Scholarship (\$1,000), St. Cloud State University

Graduate Scholarly Presentation Travel Fund (\$500), 'Variations in Bone Density within

## **PUBLICATIONS**

#### Peer Reviewed —

2025

Carr, E. M., **Martin, R. P.**, Ghedotti, M. J., & Sparks, J. S. (*In review*). A Shot in the Dark: Comparative Morphology of the Bioluminescent Tube Organs in Tubeshoulders (Platytroctidae). *PLOS One*.

- Martin, R. P., Carr, E. M., Ghedotti, M. J., & Sparks, J. S. (*In review*). Bacterial Bioluminescent Wavelengths Elicit Biofluorescent Emissions in the Ponyfish Genus *Deveximentum. Scientific Reports*.
- Carr, E. M., Thurman, M. A., **Martin, R. P.**, Sparks, T. S., & Sparks, J. S. (2025). Marine fishes exhibit exceptional variation in biofluorescent emission spectra. *PloS one*, 20(6), e0316789.
- Carr, E. M., **Martin, R. P.**, Thurman, M. A., Cohen, K. E., Huie, J. M., Gruber, D. F., & Sparks, J. S. (2025). Repeated and widespread evolution of biofluorescence in marine fishes. *Nature Communications*, 16(1), 1-10.
- **Martin, R. P.**, Carr, E. M., & Sparks, J. S. (2025). Does biofluorescence enhance visual signals in birds-of-paradise?. *Royal Society Open Science*, 12(2), 241905.
  - In the first month after publication
    - > 6.000 downloads
    - Reported on over **50 news outlets** including: <u>The New York Times</u>, <u>Science News</u>, <u>The Guardian</u>, <u>Smithsonian Magazine</u>, <u>Forbes</u>, <u>BBC</u>, <u>CNN</u>, and the Natural History Museum of London.
- **Martin, R. P.**, Carr, E. M., & Sparks, J. S. (2024). Variation in lanternfish (Myctophidae) photophore structure: A comprehensive and comparative analysis. *PLOS One.* 19, e0310976.
  - DeRaad, D. A., Files, A. N., DeCicco, L. H., **Martin, R. P.**, Holland, P., Pikacha, D. Jr., Tigulu, I. G., Boseto, D., Lavery, T. H., Andersen, M. J., & Moyle, R. G. (2024). Genomic patterns in the dwarf kingfishers (genus *Ceyx*) of northern Melanesia reveal a clear mechanistic framework explaining the paradox of the great speciators. *Evolution Letters*, grae035 "<u>Link</u> to download paper"
  - Carr, E. M., **Martin, R. P.**, & Sparks, J. S. (2024) A New Extinct Species of *Malagodon* (Cyprinodontiformes: Pantanodontidae) from Southeastern Coastal Madagascar, with a discussion of its phylogenetic relationships and a redescription of the genus. *American Museum Novitates*. 2024, 1–16 "<u>Link</u> to download paper"
  - **Martin, R. P.** & Smith, W. L. (2024). First evidence of sexual dimorphism in olfactory organs of deep-sea lanternfishes (Myctophidae). *PeerJ*, 12:e17075 "<u>Link</u> to download paper"
  - **Martin, R. P.**, Lopez Carranza, N., LaVine, R. J., & Lieberman, B. S. (2023). Morphological evolution during the last hurrah of the trilobites: Morphometric analysis of the Devonian asteropyginid trilobites. *Paleobiology*, 49, 296–312. "<u>Link</u> to download paper"
    - Martin, R. P., Dias, A., Summers, A. P., & Gerringer, M. E. (2022). Bone density variation in rattails (Macrouridae, Gadiformes): Buoyancy, depth, body size, and feeding. *Integrative and Organismal Biology*, 4, obac044. "Link to download paper"
    - Smith, W. L., Ghedotti, M. J., Domínguez-Domínguez, O., McMahan, C. D., Espinoza, E., **Martin, R. P.,** Girard, M. G., & Davis, M. P. (2022). Investigations into the ancestry of the Grape-eye Seabass (*Hemilutjanus macrophthalmos*) reveal novel limits and relationships for the Acropomatiformes (Teleostei: Percomorpha). *Neotropical Ichthyology*, 20, 03. "<u>Link</u> to download paper"
    - Martin, R. P., Davis, M. P., & Smith, W. L. (2022). The impact of evolutionary tradeoffs among bioluminescent organs and body shape in the deep sea: A case study on lanternfishes. *Deep-sea Research Part I: Oceanographic Research*, 184, 103769. "<u>Link</u> to download paper"
    - Girard, M. G., Davis, M. P., Baldwin, C. C., **Martin, R. P.**, & Smith, W. L. (2022). Molecular phylogeny of the threadfin fishes (Polynemidae) using ultraconserved elements. *Journal of Fish Biology*, 100, 793–810. "<u>Link</u> to download paper"
- Maile, A. J., May, Z. A., DeArmon, E. S., Martin, R. P., & Davis, M. P. (2020). Marine habitat transitions and body-shape evolution in lizardfishes and their allies

- (Aulopiformes). *Copeia*, 108, 820–832. **2020 Best Student Paper in Ichthyology, American Society of Ichthyology and Herpetology.** "<u>Link</u> to download paper"
- Martin, R. P., & Davis, M. P. (2020). The evolution of specialized dentition in the deep-sea lanternfishes (Myctophiformes). *Journal of Morphology*. 281, 536–555. "<u>Link</u> to download paper"
- **Martin, R. P.**, Olson, E. E., Girard, M. G., Smith, W. L., & Davis, M. P. (2018) Light in the darkness: New perspective on lanternfish relationships and classification using genomic and morphological data. *Molecular Phylogenetics and Evolution*, 121, 71–85. "Link to download paper"
  - Smith, W. L., Buck, C. A., Ornay, G. S., Davis, M. P., **Martin, R. P.**, Gibson, S. Z., & Girard, M. G. (2018) Improving vertebrate skeleton images: Fluorescence and the non-permanent mounting of cleared-and-stained specimens. *Copeia.* 106, 427–435. "<u>Link</u> to download paper"
- **Martin, R. P.** & Davis, M. P. (2016) Patterns of phenotypic variation in the mouth size of lanternfishes (Teleostei: Myctophiformes). *Copeia*. 104, 795–807. "<u>Link</u> to download paper"

#### Invited Publications and Reviews —

**Martin, R. P.** (2025). Marine Muses. *Nature Ecology and Evolution*, 1-1. **Invited Review** "Link to read online"

## Scientific Illustrations Featured in Publications —

- DeCicco, L., DeRaad, D., Holland, P., Pikacha, D., Tegulu, I., Tako, R., Boseto, K., Sweet, P., & Moyle, R. (2024). Phylogeography of the Island Leaf Warbler (Aves: *Phylloscopus Poliocephalus*) in Northern Melanesia Reveals Rapid Secondary Sympatry or Ecological Speciation on Kolombangara Island, Solomon Islands. *Bulletin of the Society of Systematic Biologists*. 3(2).
  - Gardner, S. T., & Höök, T. O. (2024). Efficacy of a novel reproductive tag to index spawn timing. *Canadian Journal of Fisheries and Aquatic Sciences*, 00, 1–6.
    - Jeffries, D. L., Mee, J. A., & Peichel, C. L. (2022). Identification of a candidate sex determination gene in *Culaea inconstans* suggests convergent recruitment of an *Amh* duplicate in two lineages of stickleback. *Journal of Evolutionary Biology*. 00, 1–13.
  - Burress, E. D., Piálek, L., Casciotta, J., Almirón, A., & Ríčan, O. (2022). Rapid Parallel Morphological and Mechanical Diversification of South American Pike Cichlids (Crenicichla). *Systematic Biology*. syac018.

#### PRESENTATIONS

#### Conferences —

- Ghedotti, M.J., **Martin, R.P.**, Sparks, J.S. Putative Anatomy of Blinking of the Bioluminescent Organ in Ponyfishes (Leiognathidae). Joint Meeting of Ichthyologists and Herpetologists, St. Paul, Minnesota, July 2025. Poster Presentation.
  - Casey, M.F., **Martin, R.P.** Understanding the Reproductive Ecology of Bighead Carp in the Platte River, Nebraska. Joint Meeting of Ichthyologists and Herpetologists, St. Paul, Minnesota, July 2025. Poster Presentation.
  - Fadool, B.A., Smukall, M.J., Guttridge, T.L., Van Zinnia Bergmann, M.P.M., **Martin, R.P.**Nurse Shark (*Ginglymostoma cirratum*) Movement Patterns Throughout the Western
    North Atlantic Ocean. Joint Meeting of Ichthyologists and Herpetologists, St. Paul,
    Minnesota, July 2025. Oral Presentation.
  - Martin, R.P., Carr, E.M., Sparks, J.S. First Evidence of Biofluorescence in Ponyfishes: A product of Bioluminescent Excitation. Joint Meeting of Ichthyologists and Herpetologists, St. Paul, Minnesota, July 2025. Oral Presentation.

- Casey, M.F., **Martin, R.P.** Increased Understanding of Invasive Carp Reproductive Ecology. Nebraska Chapter of the American Fisheries Society 56th Annual Meeting, Aurora, Nebraska, February 2025. Oral Presentation.
- Fadool, B.A., Smukall, M.J., **Martin, R.P.** Nurse Shark (*Ginglymostoma cirratum*) Movement Patterns and Strategies around Bimini, The Bahamas. Nebraska Chapter of the American Fisheries Society 56th Annual Meeting, Aurora, Nebraska, February 2025. Oral Presentation.
- **Martin, R.P.**, Carr, E.M., Sparks, J.S. First Evidence of Biofluorescence in Ponyfishes: A product of Bioluminescent Excitation. Nebraska Chapter of the American Fisheries Society 56th Annual Meeting, Aurora, Nebraska, February 2025. Oral Presentation.
- Carr, E., **Martin, R.P.**, Sparks, J.S. Totally tubular: Exploring Morphology in Bioluminescent Tubeshoulders. Encontro Brasileiro de Ictiologia, Palmas, Brazil, January 2024. Oral Presentation.
- Ghedotti, M., Valdez, J., **Martin, R.P.**, Sparks, J.S. Anatomy of the Bioluminescent Organ in Ponyfishes (Leiognathidae). Joint Meeting of Ichthyologists and Herpetologists, Pittsburgh, Pennsylvania, July 2024. Poster Presentation.

2022

- Carr, E., **Martin, R.P.**, Sparks, J.S. Totally tubular: Exploring Morphology in Bioluminescent Tubeshoulders. Annual Meeting for The Society for Integrative & Comparative Biology, Seattle, Washington, January 2024. Oral Presentation.
- Jones, M.F., Beard, K.C., **Martin, R.P.**, Salem, M.J., Chaimanee, Y., Jaeger, J.J. A New Species of *Witwatia* (Chiroptera: Philisidae) and Evaluation of the Diet of Large Eocene Bats. North American Society for Bat Research, Winnipeg, Manitoba, October 2023. Poster Presentation.
  - **Martin, R.P.** Investigation of the Anatomy and Morphology of Bioluminescent Light Organs. Joint Meeting of Ichthyologists and Herpetologists, Norfolk, Virginia, July 2023. Oral Presentation.
  - Carr, E., Martin, R.P., Thurman, M., Cohen, K., Sparks, J. Illuminating the Past: Repeated Evolution of Biofluorescence in Teleosts. Joint Meeting of Ichthyologists and Herpetologists, Norfolk, Virginia, July 2023. Poster Presentation.
  - Martin, R.P. Olfactory Organ Anatomy Across Deep-sea Lanternfishes. Joint Meeting of Ichthyologists and Herpetologists, Spokane, Washington, July 2022. Oral. Presentation. Stoye Award for Best Student Presentation in Genetics, Development, and Morphology, American Society of Ichthyology and Herpetology.
  - **Martin, R.P.** Olfactory Organ Anatomy Across Deep-sea Lanternfishes. Annual Meeting for The Society for Integrative & Comparative Biology, Phoenix, Arizona, January 2022. Oral Presentation. **Session Chair.**
- Martin, R.P. A Dive into Deep-sea Fish Diversity and the Growing Work of Early Career Scientists. Joint Meeting of Ichthyologists and Herpetologists, Phoenix, Arizona, July 2021 (Hybrid Meeting). Oral Presentation. Virtual. Invited Symposia Speaker.
- **Martin, R.P.** The Role of Phylogeny in the Evolution of Body Shape of Lanternfishes (Myctophiformes). 3 Minute Thesis, University of Kansas, Lawrence, Kansas, November 2019. Oral Presentation, **Finalist.** 
  - Martin, R.P., Dias, A., Summers, A., & Gerringer, M. Assessment of Bone Density Reduction within Deep-Sea Grenadiers (Macrouridae). Joint Meeting of Ichthyologists and Herpetologists, Snowbird, Utah, July 2019. Oral Presentation.
  - Martin, R.P., Dias, A., Summers, A., & Gerringer, M. Variations in Bone Density within Deep-Sea Grenadiers (Macrouridae). Annual Meeting for The Society for Integrative & Comparative Biology, Tampa, Florida, January 2019. Oral Presentation.
- **Martin, R.P.** The Role of Phylogeny in the Evolution of Body Shape of Lanternfishes (Myctophiformes). Joint Meeting of Ichthyologists and Herpetologists, Rochester, New York, July 2018. Oral Presentation.

2017 Martin, R.P. & Davis, M.P. Repeated Evolution of Heterodonty in Lanternfishes (Teleostei: Myctophiformes). Joint Meeting of Ichthyologists and Herpetologists, Austin, Texas, July 2017. Poster Presentation. Smith, W.L., Buck, C., Gibson, S., Davis, M.P., Martin, R.P., Girard, M. Techniques for the Improved Visualization of Vertebrate Anatomy. Joint Meeting of Ichthyologists and Herpetologists, Austin, Texas, July 2017. Poster Presentation. Martin, R.P. Relationships of Lanternfishes: A Phylogenomic Approach Using Ultraconserved Elements. Student Research Colloquium, St. Cloud State University, St. Cloud, Minnesota, April 2017. Oral Presentation. 2016 Martin, R.P. Morphological Variance in the Dentition on the Oral Jaws in Lanternfishes (Teleostei: Myctophiformes). Joint Meeting of Ichthyologists and Herpetologists, New Orleans, Louisiana, July 2016. Oral Presentation Martin, R.P. Evolution of Jaw Length and Dentition Variation in Deep-sea Lanternfishes (Teleostei: Myctophiformes). Student Research Colloquium, St. Cloud State University, St. Cloud, Minnesota, April 2016. Oral Presentation Martin, R.P. & Davis, M.P. Evolution of Jaw Shape and Length Variation in Deep-sea 2015 Lanternfishes (Teleostei: Myctophiformes). Joint Meeting of Ichthyologists and Herpetologists, Reno, Nevada, July 2015. Poster Presentation. Storer Award for Best Student Poster in Ichthyology, American Society of Ichthyology and Herpetology. Martin, R.P. & Davis, M.P. Evolution of Jaws and Ecological Niche Specialization in Deep-sea Lanternfishes. Student Research Colloquium, St. Cloud State University, St. Cloud, Minnesota, April 2015. Poster Presentation. Invited — Martin, R.P. Landlocked Marine Biology, Izaak Walton League Annual Meeting, University 2025 of Nebraska-Lincoln, Lincoln, Nebraska, January 2025. Martin, R.P. A Comparative Analysis of Primary Photophores in Lanternfishes 2024 (Myctophidae), **SNR Seminar Series**. University of Nebraska-Lincoln, Lincoln, Nebraska, October 2024. Martin, R.P. A Comparative Analysis of Primary Photophores in Lanternfishes (Myctophidae), RGGS Seminar Series. American Museum of Natural History, New York, New York, April 2024. 2023 Martin, R.P. A Deep-dive into the Evolution of Lanternfishes, Lerner Gray Committee Meeting, American Museum of Natural History, New York, New York, May 2023. 2022 Martin, R.P. Lanternfishes and Adaptation to Depth, Evolution, Ecology, and Behavior Colloquium, University of Illinois, Illinois, September 2022. Virtual. 2020 Martin, R.P. Evolution of Lanternfishes, Wainwright Lab Seminar Series, University of California, Davis, California, August 2020. Virtual. 2019 Martin, R.P. The Role of Phylogeny in the Evolution of Body Shape of Lanternfishes (Myctophiformes). Ecology and Evolutionary Biology Seminar Series, University of Kansas, Lawrence, Kansas, August 2019. 2018 Martin, R.P. My Dive into Deep-Sea Research. STEM Fellows Seminar, St. Benedictine College, Atchinson, Kansas, November 2018. Martin, R.P. Bioluminescence in the sea. Red Hot Graduate Research Seminar, University of Kansas, Lawrence, Kansas, November 2018. 2016 Martin, R.P. Evolution of Jaw Length and Evidence of Niche Differentiation in Lanternfishes (Teleostei: Myctophiformes). Biology Seminar Series, St. Cloud

State University, St. Cloud, Minnesota, January 2016.

2025 American Museum of Natural History — Visited the collections to survey and image biofluorescence in multiple lineages of birds for use in biofluorescence analyses. New York, New York. 2024 Alaska — Collected multiple fish specimens (e.g., Alaska blackfish, Slimy Sculpin, Lake Chub) from areas near Fairbanks, Quartz Lake, and Twelvemile Summit for use in UNL teaching collection. Keys, Florida — Assisted researchers from the Bimini Biological Field Station Foundation (BBFSF) "Bimini Shark Lab" in catching and tagging sharks. **Thailand** — Visited fish markets and fisherman piers and to collect fresh fish specimens for work on bioluminescence and biofluorescence. Analyzed specimens on-site and prepped for transport and shipment to USA. Bangkok, Phuket, and Prachaup Khiri 2023 Smithsonian Institution — Visited ichthyology collections to digitize tube shoulder specimens for geometric morphometric research. Washington, District of Columbia. Harvard Museum of Comparative Zoology — Visited ichthyology collections to digitize tube shoulder specimens for geometric morphometric research. Cambridge, Massachusetts. Yale Peabody Museum of Natural History — Visited ichthyology collections to digitize tube shoulder specimens for geometric morphometric research. New Haven, Connecticut. **Regis University** — Visited for in-depth training on histological techniques and analyses of bioluminescent light organs of fishes. Host: Dr. Mike Ghedotti 2022 **Aetna, Kansas Resurvey** — Participated in a week-long collecting event in Aetna Kansas aimed at resurveying the fauna (e.g., amphibians, birds, mammals) in the area in an attempt to assess change in biodiversity through time using KU's Natural History Museum collections. Aetna, Kansas. American Museum of Natural History — Visited the collections to survey olfactory 2021 organs of lanternfishes and take images of rare species for use in body shape and light organ analyses. New York, New York. 2019 Natural History Museum of Los Angeles County — Visited collections to dissect myctophid stomachs for research on microplastics and diet. Los Angeles, California. 2016 Deep-sea Pacific Trawl — Identified and collected deep-sea marine fishes and tissue samples from 25 trawls within the La Jolla Fan Valley aboard the R/V Robert Gordon Sproul. San Diego, California. Biodiversity Institute, University of Kansas — Visited the collections to observe and digitize specimens for research. 2015 **Field Museum** — Visited collections to request loans and to observe and digitize specimens for research. Chicago, Illinois.

#### **OUTREACH AND EDUCATION**

**Practical Electrofishing 3-Day Course,** I set up and hosted at UNL (sponsored by NE AFS). Instructed by Dr. Jim Reynolds and Dr. Jan Dean. Generated an additional \$1,600 in funds accrued for NE AFS through course registration fees.

Fish Lab and Deep Sea Fishes, 'Women in Science,' high school students come to UNL to explore careers in science. University of Nebraska-Lincoln

**Scientist Participant** in Letters to a Pre-Scientist (an organization recognized for excellence in supporting women and girls in STEM, making the shortlist for the Nature Research Innovating Science Award).

- **The Deep Scattering Layer,** 'Nerd Nite,' hosted at Saro Cider, Lincoln, Nebraska, December 19th.
  - **Deep-sea Specimens / New Lab Tour,** hosted the UNL Fisheries club for a look at the lab, deep-sea specimens, and educated about bioluminescence. University of Nebraska-Lincoln Hardin Hall, Lincoln, Nebraska. November 18th.
  - **Spooky Fish Science,** 'Morrill Hall-oween Spooktacular Event,' University of Nebraska-Lincoln Morrill Hall State Museum, Lincoln, Nebraska, October.
  - **Scientist Participant** in Letters to a Pre-Scientist (an organization recognized for excellence in supporting women and girls in STEM, making the shortlist for the Nature Research Innovating Science Award).
  - **Happy Fish Happy Hour Trivia,** Partnered with the World Fish Migration Foundation in the creation of Happy Hour Migration Fish trivia questions in preparation for World Fish Migration Day.
  - Museum Collections and Science, Presentation to the 1st grade class in the Science and Nature program. American Museum of Natural History, New York, New York, December 15th.
    - **Ichthyology Booth,** 'Family Party', American Museum of Natural History, New York, New York, October 18th.

- **SHERP Collections Tour,** American Museum of Natural History, toured the students from the NYU's Science, Health, and Environmental Reporting Program through the Ichthyology Collection. New York, New York, September 26th.
- **Coral Reefs and the Deep Sea,** Presentation to 2nd and 3rd grade summer "-ologies" camp about coral reefs and my research on the deep sea. American Museum of Natural History, New York, New York, August 16th.
- **GSTEM Collections Tour,** American Museum of Natural History, toured the students from the NYU's GSTEM program through the Ichthyology Collection and also talked about women in science. New York, New York, July 28th.
- Renaissance Youth Center Collections Tour, American Museum of Natural History, toured the students from the Renaissance Youth Center through the Ichthyology Collection. New York, New York, July 18th.
- **BioBlitz: Renaissance Youth Center,** Fish expert for BioBlitz event targeting education and outreach with at-risk inner-city youth in the <u>Renaissance Youth</u> program from the South Bronx. Shandaken, New York, June 2nd 4th.
- **Fish Dissection,** Helped guide and educate 1st grade students in dissecting fishes. Marine Biology class, American Museum of Natural History, New York, New York, March 15th.
- **The Deep Sea,** Presentation to 1st grade Marine Biology class about the deep sea, the organisms that live there, and how we study the deep sea. American Museum of Natural History, New York, New York, March 10th.
- **Trustee Collections Tour,** American Museum of Natural History, met one-on-one with a trustee and discussed my research and gave them a tour of the collection. New York, New York, March 8th.
- **Collections / Lab Tour,** University of Kansas Natural History Museum, met one-on-one with a Haskell University Native American student interested in research on deep-sea fishes. Lawrence, Kansas, October 10th.
- Jellies and Lanterns, Lawrence Public Library, Lawrence, Kansas, July 6th.
- **Meet a Marine Biologist,** Topeka and Shawnee County Public Library, Topeka, Kansas, July 5th.
- **Deep-sea Fishes,** 'Imaginarium: Extreme Ocean Animals,' Lawrence Public Library, Lawrence, Kansas, June 27th.
- **Bioblitz,** Topeka Riverbank Restoration Project, Friends of the Kaw, Kaw River State Park, Kansas, May 7th.

- **Deep-sea Fishes Booth,** 'Women in Science,' University of Kansas Natural History Museum, Lawrence, Kansas, March 26th.
- **Fish Bones of the Kaw Booth,** 'Bones of the Kaw,' University of Kansas Natural History Museum and Friends of the Kaw, Lawrence, Kansas, March 24th.
- **Collections Tour,** University of Kansas Natural History Museum, met one-on-one with a high school student interested in scientific illustration. Lawrence, Kansas, February.
- **NOAA Professional Development for educators,** Midwest area. Guest expert on bioluminescence. Virtual. November.
- **Collections Tour,** University of Kansas Natural History Museum, gave a brief talk to a class in the Panorama and toured them through the wet collection. Lawrence, Kansas, September.
- **Scientist Participant** in Letters to a Pre-Scientist (an organization recognized for excellence in supporting women and girls in STEM, making the shortlist for the Nature Research Innovating Science Award).
- **Freaky Fishes,** 'Macabre at the Museum,' University of Kansas Natural History Museum, Lawrence, Kansas, October.
- **Members Night,** 'Deep Scattering Layer,' presentation, University of Kansas Natural History Museum, Lawrence, January 28th. Virtual.
- **Meet a Marine Biologist,** Presentation to Girl Scouts around Lawrence, Kansas. Virtual. February 7th.
- **Fish Reproduction Booth,** 'Sexy Science,' University of Kansas Natural History Museum, Lawrence, Kansas, February.
- **Ichthyology Collections,** 'Collections up Close,' University of Kansas Natural History Museum and University of Kansas Union, Lawrence, Kansas, February.
- **My Dive into Deep-Sea Research,** presented to the University of Kansas SEEDS (Ecology) Club, University of Kansas, Lawrence, Kansas, February.
- **Scientist Participant** in Letters to a Pre-Scientist (an organization recognized for excellence in supporting women and girls in STEM, making the shortlist for the Nature Research Innovating Science Award).
- **Learn How to Fish,** taught girl scouts at Camp Tongawood how to fish, Tonganoxie, Kansas, June.
  - Threatened and Endangered Fish Species, 'Discovery Day: Endangered Species,' University of Kansas Natural History Museum, Lawrence, Kansas, December 8th.
  - **Freaky Fishes,** 'Macabre at the Museum,' University of Kansas Natural History Museum, Lawrence, Kansas, October.
  - **Fishes of the Deep Sea Booth,** 'Discovery Day: Marine Life,' University of Kansas Natural History Museum, Lawrence, Kansas, May 24th.
  - Deep-sea Diversity, 'Science Night,' Lawrence Beer Company, Lawrence, Kansas, March.
  - **Fish Reproduction Booth,** 'Sexy Science', University of Kansas Natural History Museum, Lawrence, Kansas, February.
  - **Scientist Participant** in Letters to a Pre-Scientist (an organization recognized for excellence in supporting women and girls in STEM, making the shortlist for the Nature Research Innovating Science Award).
  - **Deep-sea Macabre Fishes Booth,** 'Macabre at the Museum,' University of Kansas Natural History Museum, Lawrence, Kansas, October.
  - **Scientist Participant** in Letters to a Pre-Scientist (an organization recognized for excellence in supporting women and girls in STEM, making the shortlist for the Nature Research Innovating Science Award).
  - **Ichthyology Deep-sea Collections,** 'Collections up Close,' University of Kansas Union, Lawrence, Kansas, April.
  - Deep-sea Diversity, 'Science Night', Lawrence Beer Company, Lawrence, Kansas, March.

Fish Reproduction Booth, 'Sexy Science,' University of Kansas Natural History Museum, Lawrence, Kansas, February. Deep-sea Fishes Booth, 'Science of the Macabre', University of Kansas Natural History 2017 Museum, Lawrence, Kansas, October. Invasive Species Awareness, 'The Global Social Responsibility Conference,' St. Cloud 2014 State University, St. Cloud, Minnesota. Oral Presentation. Co-creator of interpretive trail signs for educational purposes at Camp Ripley, Minnesota MEDIA APPEARANCES AND FEATURES 2025 Featured in 'Moment of Science,' in March talking about research on 'Bird Biofluorescence.' WTVG 13 Action News, Dan Smith. Featured in 'Office of Research and Innovation story,' in February 'Husker scientist illuminates species' ability to glow.' University of Nebraska - Lincoln. Featured in the 'SNR's News Stories,' in February, 'SNR faculty lead second successful study abroad to Bahamas.' University of Nebraska - Lincoln. 2024 Featured in the 'BioNexus | KC Sci2Art' video talking about the intersection of science, art, and my submitted art piece. Featured on the 'Fisheries Podcast,' episode 279, 'Catching up with Dr. Rene Martin'. Hosted by Kansas Fisheries Biologist Nick Kramer. Featured on the 'SNR's News Stories,' in July, 'Martin introducing Nebraska students to fish aglow.' University of Nebraska - Lincoln. Featured on St. Cloud State's USA Today article on Launching a science career through 2023 moments of discovery at SCSU. Article by Melissa Karns. **Featured** on St. Cloud State University's <u>LinkedIn post</u> on #IStandwith SCSU. Featured on the 'PikaScience Podcast,' episode "Pokescience: PokeCollege - Where Did That Egg Come From?" Hosted by Cecilia Adele. 2022 Featured in 'Amplified Voices: A Collection of Discussion from Women of Fisheries.' Fisheries Magazine. Article by Heather Moncrief-Cox. Featured on 'Art in Bio,' ICB author Noah Bressman & IOB author Rene P. Martin. Article by Suzanne Miller and Andrew Saintsing. 2021 Midwest Area Expert on NOAA's Professional Development live event on Bioluminescence. **Guest Expert** on NOAA's 'Deep-Sea Dialogues' series video **Bioluminescence**. Featured on the University of Kansas' Office of Research 'News,' KU Researcher Fosters Online Community of Fish Scientists and Artists. Featured on the San Francisco 'Estuary News,' A Stream of Science Takeaways. Featured on 'Our Ocean and You,' Rene Martin: Ph.D. Student, Deep-sea Scientist, Artist. Featured in a video focused on **Red-tailed hawk tracking research** ongoing at KU. Featured on 'Women of Fisheries,' <u>Talented Women in Art and Marine Science</u>. Interviewed by 'Inside Science' discussing a recent publication on a fossil lanternfish otoliths. Article by Joshua Learn. 2020 Highlight of Alaska SeaLife Center's video series 'Telequarium' #SundayFishSketch **Draw Along.** Multiple weekly videos. Featured on the 'Fisheries Podcast,' episode 107, student update episode, Where Are They Now? Hosted by Kansas Fisheries Biologist Nick Kramer. Featured on 'Seaside with Emily,' Why I pursued Marine Research: Stories from

Scientists Around the World.

	Interviewed by 'Popular Science' discussing a recent publication on a <u>bioluminescent</u> <u>gene in pyrosomes</u> . Article by Maria Paula Rubiano.
2019	Interviewed by 'PBS NOVA' discussing a recent publication on <u>Green Biofluorescence in Sharks</u> . Article by Katherine Wu.
	<b>Featured</b> on the 'Fisheries Podcast,' episode 28, discussing Deep-sea Research, Expeditions, and the #SundayFishSketch. Hosted by Kansas Fisheries Biologist Nick Kramer.
	<b>Featured</b> in the 'BioNexus   KC Sci2Art' video talking about the intersection of science, art, and my submitted art piece.
2018	Interviewed by 'The Scientist,' discussing a recent publication on <u>lanternfish</u> <u>diversification</u> . Article by Jim Daley.
	<b>Featured</b> on the University of Washington's <u>Blog post</u> regarding the #SundayFishSketch on Twitter.
	Featured on the Fisheries Blog regarding the #SundayFishSketch on Twitter
2017	Martin, R.P. (2017) Backpage article: Art of the Deep. Fisheries. 42:244
2016	Photographs used in news articles —
	University of Kansas: New research shines light on surprising numbers and evolutionary variety of bioluminescent ocean fishes
	• Mashable: Far more fish make their own light than we thought, study finds
	• Live Science: Flash Mob! Glowing in Fishes More Widespread Than Thought
	• Ars Technica: Evolution favors the bioluminescent
ACHIEVEM	IENTS
2025	Created the new logo for the University of Kansas Biodiversity Institute Division of Ornithology
2025 2024	
	Ornithology  SEM image chosen for <u>BioNexus Science to Art</u> auction (\$540), proceeds benefit
	Ornithology <b>SEM image chosen for <u>BioNexus Science to Art</u> auction</b> (\$540), proceeds benefit STEAM education in the KC region
2024	Ornithology  SEM image chosen for <u>BioNexus Science to Art</u> auction (\$540), proceeds benefit STEAM education in the KC region  Created the new logo for the <u>Nebraska Chapter</u> of the American Fisheries Society  Art piece used in BioNexus Science to <u>Art Flyer</u> , proceeds benefit STEAM education in
2024	Ornithology  SEM image chosen for BioNexus Science to Art auction (\$540), proceeds benefit STEAM education in the KC region  Created the new logo for the Nebraska Chapter of the American Fisheries Society  Art piece used in BioNexus Science to Art Flyer, proceeds benefit STEAM education in the KC region  Frederick H. Stoye Award for Best Student Presentation in Genetics, Development, and Morphology (\$300), 'Olfactory Organ Anatomy Across Deep-sea
2024 2023 2022	Ornithology  SEM image chosen for BioNexus Science to Art auction (\$540), proceeds benefit STEAM education in the KC region  Created the new logo for the Nebraska Chapter of the American Fisheries Society  Art piece used in BioNexus Science to Art Flyer, proceeds benefit STEAM education in the KC region  Frederick H. Stoye Award for Best Student Presentation in Genetics, Development, and Morphology (\$300), 'Olfactory Organ Anatomy Across Deep-sea Lanternfishes,' American Society of Ichthyologists and Herpetologists  Cleared and Stained Fish art piece chosen for BioNexus Science to Art auction,
<ul><li>2024</li><li>2023</li><li>2022</li><li>2021</li></ul>	SEM image chosen for BioNexus Science to Art auction (\$540), proceeds benefit STEAM education in the KC region  Created the new logo for the Nebraska Chapter of the American Fisheries Society  Art piece used in BioNexus Science to Art Flyer, proceeds benefit STEAM education in the KC region  Frederick H. Stoye Award for Best Student Presentation in Genetics, Development, and Morphology (\$300), 'Olfactory Organ Anatomy Across Deep-sea Lanternfishes,' American Society of Ichthyologists and Herpetologists  Cleared and Stained Fish art piece chosen for BioNexus Science to Art auction, proceeds benefit STEAM education in the KC region  Four art pieces chosen for LibArt exhibition, University of Kansas, one awarded 'Top Honors'  CT Scan art piece chosen for BioNexus Science to Art auction (\$375), proceeds
2024 2023 2022 2021 2020	SEM image chosen for <u>BioNexus Science to Art</u> auction (\$540), proceeds benefit STEAM education in the KC region  Created the new logo for the <u>Nebraska Chapter</u> of the American Fisheries Society  Art piece used in BioNexus Science to <u>Art Flyer</u> , proceeds benefit STEAM education in the KC region  Frederick H. Stoye Award for Best Student Presentation in Genetics, Development, and Morphology (\$300), 'Olfactory Organ Anatomy Across Deep-sea Lanternfishes,' American Society of Ichthyologists and Herpetologists  Cleared and Stained Fish art piece chosen for <u>BioNexus Science to Art</u> auction, proceeds benefit STEAM education in the KC region  Four art pieces chosen for LibArt exhibition, University of Kansas, one awarded 'Top Honors'
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2024 2023 2022 2021 2020 2019	Ornithology  SEM image chosen for BioNexus Science to Art auction (\$540), proceeds benefit STEAM education in the KC region  Created the new logo for the Nebraska Chapter of the American Fisheries Society  Art piece used in BioNexus Science to Art Flyer, proceeds benefit STEAM education in the KC region  Frederick H. Stoye Award for Best Student Presentation in Genetics, Development, and Morphology (\$300), 'Olfactory Organ Anatomy Across Deep-sea Lanternfishes,' American Society of Ichthyologists and Herpetologists  Cleared and Stained Fish art piece chosen for BioNexus Science to Art auction, proceeds benefit STEAM education in the KC region  Four art pieces chosen for LibArt exhibition, University of Kansas, one awarded 'Top Honors'  CT Scan art piece chosen for BioNexus Science to Art auction (\$375), proceeds benefit STEAM education in the KC region  Five art pieces chosen for LibArt exhibition, University of Kansas, two awards  Distinguished Masters Thesis Award - 2017 (\$200), St. Cloud State University  Outstanding Graduate Student Award, St. Cloud State University
2024 2023 2022 2021 2020 2019 2018 2016	SEM image chosen for BioNexus Science to Art auction (\$540), proceeds benefit STEAM education in the KC region  Created the new logo for the Nebraska Chapter of the American Fisheries Society  Art piece used in BioNexus Science to Art Flyer, proceeds benefit STEAM education in the KC region  Frederick H. Stoye Award for Best Student Presentation in Genetics, Development, and Morphology (\$300), 'Olfactory Organ Anatomy Across Deep-sea Lanternfishes,' American Society of Ichthyologists and Herpetologists  Cleared and Stained Fish art piece chosen for BioNexus Science to Art auction, proceeds benefit STEAM education in the KC region  Four art pieces chosen for LibArt exhibition, University of Kansas, one awarded 'Top Honors'  CT Scan art piece chosen for BioNexus Science to Art auction (\$375), proceeds benefit STEAM education in the KC region  Five art pieces chosen for LibArt exhibition, University of Kansas, two awards  Distinguished Masters Thesis Award - 2017 (\$200), St. Cloud State University  Outstanding Graduate Student Award, St. Cloud State University  Denise McGuire Student Research Award (\$200), St. Cloud State University

## Graduate Student Advising —

#### 2024

- Madison Casey (Graduate) M.S. (Incoming January 2025), University of Nebraska-Lincoln, NE. Thesis work will focus on reproductive ecology of invasive carps.
- Baylie Fadool (Graduate) M.S. (2024), University of Nebraska-Lincoln, NE. Thesis work focuses on population and movement dynamics of nurse sharks from the Bahamas.

## Grants received during advisement:

• Raney Fund (\$1,000) American Society of Ichthyology and Herpetology

## Other Student Mentoring —

### 2024

- Bryce Christensen (Post Baccalaureate) B.S. (2021), University of Nebraska Lincoln, NE. Mentored in post-baccalaureate job/graduate school seeking. Edited curriculum vitae and job applications.
- Hendy Ginting (Undergraduate) B.S. (2024), University of Nebraska Lincoln, NE. Committee member on undergraduate thesis committee. Wrote letters of recommendation for his applications as an MS to the School of Biological Sciences.
- Kayce Stevens (Undergraduate) B.S. (2024), University of Nebraska Lincoln, NE. Mentored in post-baccalaureate job-seeking, edited job applications, wrote letters of recommendation.

  Acquired a position at Alaska SeaLife Center.
- Hannah Carden (Undergraduate) B.S. (2024), University of Nebraska Lincoln, NE. Mentored in post-baccalaureate job-seeking, edited job applications.
- Emily Carr (Graduate) Ph.D. Student (expected 2026), American Museum of Natural History, NY.

  Mentored in database searching, clearing and staining techniques, histological methods, museum specimen analysis of morphology, and manuscript writing.
- Caedryn Carter (Undergraduate) B.S. (2024), University of Kansas, KS. Mentored in the segmenting of 3D CT scan data and subsequent analyses including 3D geometric morphometrics.

#### 2023

Jack Degnan (Undergraduate) B.S. (2024), Connecticut College, CT. Mentored in imaging, geometric morphometrics, and histological techniques.

## 2022

- Lauren Meyer (Undergraduate) B.S. (2023), University of Kansas, KS. Mentored in freshwater fish sampling techniques (e.g., seining) and investigation/use of museum database.
- Dylan Wootton (Undergraduate) B.S. (2023), University of Kansas, KS. Mentored in the use of stereomicroscopes and the assessment of olfactory organs in fishes.

#### 2021

Matt Jones (Graduate) Ph.D. Student (2021), University of Kansas, KS. Mentored in the use of geometric morphometrics and landmark placement on fossil bat dentition.

#### 2019

Heidi Burns (Undergraduate) B.S. (2020), University of Kansas, KS. Mentored in the use of stereomicroscopes and measurement of lanternfish olfactory organs.

#### 2018

- Katelyn Schmidtlein (Undergraduate) B.S. (2019), University of Kansas, KS. Mentored in specimen imaging and geometric morphometrics.
- Abbey Dias (Undergraduate) B.S. (2020), Whitman College, WA. Mentored in manuscript writing and Micro-CT scanning techniques.

#### 2015

Emily Olson (Undergraduate) B.S. (2017), St. Cloud State University, MN. Mentored in species identification, specimen imaging, and phylogenetic techniques.

## **JOURNAL REVIEWS**

## **Total Papers Reviewed: 31**

List of Journals Reviewed for (13): Australian Field Ornithology, Fishery Bulletin - NOAA Professional Paper NMFS, Ichthyology & Herpetology, Ichthyological Research, Deep-Sea Research Part I, Journal of Fish Biology, Journal of Zoology, Marine Biology Research, Marine Science and Engineering, Nature: Communications Biology, Paleobiology, Peerl, Phuket Marine Biological Center Research Bulletin, Zootaxa.

## 2025

- Australian Field Ornithology
- Deep-Sea Research I
- Marine Science and Engineering
- Journal of Zoology
- Zootaxa

#### 2024

- PeerJ
- Deep-Sea Research I
- Ichthyological Research
- Zootaxa

#### 2023

- NOAA Fishery Bulletin
- Marine Biology Research
- Zootaxa

#### 2022

- Journal of Fish Biology

#### 2021

- Marine Science and Engineering
- Ichthyology and Herpetology (2)

## 2020

- Paleobiology
- Zootaxa (2)
- Journal of Fish Biology
- Ichthyology and Herpetology

#### 2019

- Ichthyology and Herpetology (3)
- Phuket Marine Biological Center Research Bulletin (2)
- Nature: Communications Biology
- Journal of Fish Biology

#### 2018

- Ichthyology and Herpetology (2)

#### 2017

Deep-Sea Research I

### 2015

- Zootaxa

## Member on Student Committees (UNL) —

2025

Israt Jahan (Ph.D.) Main advisor: Mark Pegg Ciara Nelson (M.S.) Main advisor: Abigail Cochran

Hendy Ginting (B.S.) Graduated Spring 2025, Main advisor: Dennis Ferraro

2024

Brett Anderson (M.S.) Graduated Spring 2025, Main advisor: Jonathan Spurgeon

Josh Kocik (M.S.) Graduated Fall 2024, Main advisor: Mark Pegg Marshall Stuart (M.S.) Graduated Fall 2024, Main advisor: Mark Pegg

#### Committees —

Committee	
2025	Cabela's Apprenticeship Award Committee, University of Nebraska-Lincoln
	Hiring Committee, for Fishery Management Research Technologist position
2024-Present	SNR Community Engagement Committee, University of Nebraska-Lincoln
2024-Present	SNR Fish and Wildlife Curriculum Committee, University of Nebraska-Lincoln
2023-Present	<b>Board of Governors,</b> elected governor in the 'Early Career' category, five year term. American Society of Ichthyologists and Herpetologists
2021	Leaman D. Harris Committee, University of Kansas Biodiversity Institute
2020–2021	<b>Fundraising Committee,</b> University of Kansas Ecology and Evolutionary Biology Graduate Student Organization
2019–2020	Student Representative for the Biodiversity Institute Research Planning Committee, University of Kansas Ecology and Evolutionary Biology Graduate Student Organization
2019	<b>Ichthyology Best Paper in </b> <i>Copeia</i> <b> Committee, </b> American Society of Ichthyologists and Herpetologists
	Panorama Grant Review Committee, University of Kansas Biodiversity Institute
2018–2019	<b>Social Committee,</b> University of Kansas Ecology and Evolutionary Biology Graduate Student Organization
	Student Representative for the Graduate Program Committee, University of Kansas Ecology and Evolutionary Biology Graduate Student Organization

## Officer Positions —

2020–2021	<b>Co-president,</b> University of Kansas Ecology and Evolutionary Biology Graduate Student Organization
2016	President, St. Cloud State Biology Graduate Student Association
2015	Vice President, St. Cloud State Biology Graduate Student Association
2013-2014	Vice President, St. Cloud State Ecology Club

Evolutionary Biology Graduate Student Organization

Graduate Student Organization

Research and Travel Awards Committee, University of Kansas Ecology and

Social Media Committee, University of Kansas Ecology and Evolutionary Biology

#### Other —

2017

Mark-Recapture Activity, for high school recruitment event for students from Westview Highschool.

**Judge,** for two sessions of student posters for Science Literacy 101: Science and Decision-making for a Complex World (SCIL 101).

2024-Present	Advisor, UNL Fisheries Club.
2024	<b>Reviewer,</b> for Near, T. J., & Thacker, C. E. (2024). Phylogenetic classification of living and fossil ray-finned fishes (Actinopterygii). <i>Bulletin of the Peabody Museum of Natural History</i> , 65, 3–302. on sections: <i>Myctophiformes</i> and <i>Ctenosquamata</i>
2023	<b>Session Mediator,</b> for the Joint Meeting of Ichthyologists and Herpetologists, Norfolk Virginia, July 2023.
	<b>Judge,</b> for student talk Stoye awards for "Genetics, Development, & Morphology at the Joint Meeting of Ichthyologists and Herpetologists, Norfolk Virginia, July 2023.
	<b>Reviewer,</b> for the Lerner Gray student grant proposals, American Museum of Natural History, April.
2020-2023	Author for the 'Fisheries Blog,' https://thefisheriesblog.com
2021	Guest Panelist, Science and Art, Bay Delta Science Conference, April 7th. Virtual <a href="http://baydeltascienceconference.org">http://baydeltascienceconference.org</a>
	Guest Speaker, Class: Evolutionary Biology, Upward Bound UNITE, University of Kansas, Lawrence, Kansas, June 30th, Instructor: Matthew Jones. Virtual
	Guest Panelist, STEM + Art, Vanderbilt University, Nashville, Tennessee, June 11th. Virtual
	Judge, Canadian Science Publishing 2021 Visualizing Science contest <a href="https://blog.cdnsciencepub.com/visualizing-science-through-sketching/">https://blog.cdnsciencepub.com/visualizing-science-through-sketching/</a>
	Onshore Scientist, NOAA's Okeanos Ocean Explorer Midwater dives, June 25th, July 28th
2020	Created fish coloring pages, for use by the University of Kansas Natural History Museum, available for <u>download</u>
	Created a <u>video</u> on a step-by-step process on how to use iNaturalist, for use by the University of Kansas Natural History Museum
	Judge, Science Fair Langston Hughes Elementary School, Lawrence, Kansas, January
2013–2016	Tutor, Ecology and Field Biology, St. Cloud State University
	Volunteer, North American Amphibian Monitoring Program, Minnesota
2014	Volunteer, Christmas Bird Count, Minnesota
2013	Judge, Central Minnesota Science Fair, St. Cloud State University
2012	Volunteer, Invasive Plant Monitor, Maplewood Nature Center, Minnesota
AFFILIATIO	NS, PROFESSIONAL MEMBERSHIPS, AND CERTIFICATIONS

### AFFILIATIONS, PROFESSIONAL MEMBERSHIPS, AND CERTIFICATIONS

## Affiliations —

**2024-Present Adjunct Researcher,** American Museum of Natural History, 200 Central Park W., New York, NY 10024

2024-Present Adjunct Researcher, University of Kansas Biodiversity Institute, 1345 Jayhawk Blvd, Lawrence, KS 66045

## Professional Memberships —

	1
2024-Present	American Fisheries Society
2015-Present	American Society of Ichthyologists and Herpetologists
2015-2018	Society of Systematic Biologists
2018-2022	Society for Integrative and Comparative Biology
2021-2022	Society for the Study of Evolution
2021-2022	Deep-Sea Biology Society

## Certifications —

2023 PADI Rescue Diver certified

PADI Advanced Open Water certified

PADI Open Water certified

## WORKSHOPS/SYMPOSIA ATTENDED

2025	Mentoring and Teaching Graduate Students hosted by the New Faculty Development
	Program, University of Nebraska-Lincoln, Lincoln, Nebraska
2024	Supporting Students' Academic, Social, and Emotional Well-being hosted by the New Faculty Development Program, University of Nebraska-Lincoln, Lincoln, Nebraska
2022	<b>Genetics Symposium</b> hosted by KU Center for Genomics, University of Kansas, Lawrence, Kansas.
2020	Introduction to Python workshop hosted by the Ecology and Evolutionary Biology Graduate Student Organization, the Society for Advancement of Chicanos/ Hispanics and Native Americans in Science Student Organization, and Dr. John Kelly, University of Kansas, Lawrence, Kansas.
2019	<b>Comparative Phylogenetics in R</b> workshop hosted by the Joint Meeting of Ichthyologists and Herpetologists, Snowbird, Utah.
2018	Friday Harbor Laboratories Fish Biomechanics Course: Learned collection techniques (trawling, seining, night-lighting, tide-pooling), micro-CT scanning, software programs involving 3D data manipulation, fish biomechanics, manuscript preparation, presentation skills.
	Software Carpentry (Python and Unix Shell) workshop hosted by the Software Carpentry Foundation, University of Kansas, Lawrence, Kansas.
	<b>Webscraping</b> workshop hosted by Dr. Mark Holder and the Society for Advancement of Chicanos/Hispanics and Native Americans in Science Student Organization, University of Kansas, Lawrence, Kansas.
2016	Python-based UCE Workshop hosted by the University of Minnesota, St. Paul, MN
2015	<b>Systematics</b> workshop hosted by the Society of Systematic Biologists, University of Michigan, Ann Arbor, Michigan.

## PROFESSIONAL REFERENCES

## Dr. Wm. Leo Smith

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## Dr. Matthew Davis

Assistant Professor of Biology St. Cloud State University 720 4<sup>th</sup> Ave S. St. Cloud, MN 56301 (320) 308-3222 mpdavis@stcloudstate.edu

## Dr. Bruce Lieberman

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## Nick Kramer

Perry District Fisheries Biologist Northeast Kansas Regional Habitat Coordinator Kansas Department of Wildlife and Parks 5441 West Lake Rd. Ozawkie, KS 66070 Office: 785-246-4514 Cell: 785-256-3721

## Dr. Robert Moyle

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## Dr. John Sparks

Professor, Richard Gilder Graduate School
Curator, Department of Ichthyology, Division of Vertebrate Zoology
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