Email: crawford.callie@gmail.com • Website: https://crawfordcallie.wixsite.com/home • Twitter: @CallieHCrawford

# PROFESSIONAL APPOINTMENTS

## Coastal Carolina University

• Assistant Professor, Department of Biology (August 2023-present)

## University of Louisiana at Lafayette

- Visiting Assistant Professor, Department of Biology (August 2022 July 2023)
- **Postdoctoral Researcher** in the Kane Lab (August 2022 August 2022)

#### **EDUCATION**

### New Jersey Institute of Technology

- **PhD.** in Biology- Ecology and Evolution, May 2021 (4.00 GPA)
- Dissertation: These Fish Were Made for Walking: Morphology & Walking Kinematics In Balitorid Loaches

#### College of Charleston

- M.Sc. in Marine Biology, December 2014 (4.00 GPA)
- Thesis: Skeletal Anatomy in the Chondrichthyan Tree of Life

## University of Rhode Island

- **B.S.** in Marine Biology, May 2010 (3.92 GPA)
- Minors: Leadership Studies and Wildlife & Conservation Biology
- Summa cum laude, University and Departmental Honors

## **PUBLICATIONS**

- 11. Hoover, R. C., O.H. Hawkins, J. Rosen, C.D. Wilson, **C.H. Crawford**, M. Holst, J. M. Huie, A.P. Summers, C.M. Donatelli, & K.E. Cohen. (2023). It Pays to Be Bumpy: Drag Reducing Armor in The Pacific Spiny Lumpsucker, *Eumicrotremus orbis*. Integrative and Comparative Biology, icad076.
- 10. Hawkins, O.H., **C.H. Crawford**, R.C. Hoover, & E.A. Kane. (2023). Intraspecific variation in feeding and locomotor kinematics during prey capture in redbreast sunfish (*Lepomis auritus*). Journal of Experimental Zoology Part A: Ecological and Integrative Physiology.
- 9. **Crawford, C.H.**, A. Webber-Schultz, P.B. Hart, Z.S Randall, C. Cerrato-Morales, A.B. Kellogg, H.E. Amplo, A. Suvarnaraksha, L.M. Page, P. Chakrabarty, & B.E Flammang. (2022). They Like to Move it (Move it): Walking Kinematics of Balitorid Loaches of Thailand. *Journal of Experimental Biology*, 225 (6), jeb.242906
- 8. **Crawford C.H.**, Z.S. Randall, P.B. Hart, L.M. Page, P. Chakrabarty, A. Suvarnaraksha, B.E. Flammang. (2020). Skeletal and muscular pelvic morphology of Hillstream Loaches (Cypriniformes: Balitoridae). *Journal of Morphology*, 281(10). jmor.21247.
- 7. Cohen, K.E., **C.H. Crawford**, L.P. Hernandez, M. Beckert, J.H. Nadler, B.E. Flammang. (2020). Sucker with a fat lip: the soft tissues underlying the viscoelastic grip of remora adhesion. *Journal of Anatomy*, 237(4), joa.13227.
- 6. Cohen, K.E., B.E. Flammang, **C.H. Crawford**, L.P. Hernandez, (2020). Knowing when to stick: touch receptors found in the remora adhesive disc. *Royal Society Open Science* 7.
- 5. Cohen, K.E., L.P. Hernandez, **C. H. Crawford**, and B.E. Flammang. (2018). Channeling vorticity: Modeling the filter-feeding mechanism in silver carp using μCT and 3D PIV. *Journal of Experimental Biology*, 221(19), jeb183350.
- 4. McQuiston, A.D., C. Crawford, U.J. Schoepf, A. Varga-Szemes, C. Canstein, M. Renker, C.N. De Cecco, S. Baumann, and G. J.P. Naylor, (2017). Segmentations of the cartilaginous skeletons of chondrichthyan fishes by the use of state-of-the-art computed tomography. *World Journal of Radiology* 9, no. 4: 191.

- 3. Clark, A. J., C. H. Crawford, B. D. King, A. M. Demas, & T. A. Uyeno, (2016). Material Properties of Hagfish Skin, with Insights into Knotting Behaviors. *The Biological Bulletin*, 230(3), 243-256.
- 2. **Crawford, C.H.**, J.M. Kemper, and G.J.P. Naylor. (2016). Complete mitochondrial genome of the winghead shark, *Eusphyra blochii* (Elasmobranchii: Sphyrnidae). *Mitochondrial DNA*.
- 1. Yergey, M., T. Grothues, K. Able, **C. Crawford**, and K. DeCristofer. (2012). Evaluating discard mortality of summer flounder (*Paralichthys dentatus*) in the commercial trawl fishery: Developing acoustic telemetry techniques. *Fisheries Research*. 115-116: 72-81.

# PUBLICATIONS IN PREP

Crawford, C.H., S. Yadav, J. M. Huie, and E. A. Kane, Stop, Chomp, and Roll: Rotational feeding behavior in sculpins. *Under Review*.

# **AWARDS, HONORS, AND GRANTS**

11 ((ARDS, 110	TOOLS, AND GRANTS
RESEARCH G	RANTS AND FELLOWSHIPS
2023	Louisiana Board of Regents Support Fund, Sculpting sculpins: form and function of pectoral fin
	specialization in intertidal fishes, Awarded to E. A. Kane at UL Lafayette, co-written by O. H.
	Hawkins (Grad Student) and C. H. Crawford (Postdoc), \$159,000 over 3 years.
2022	Company of Biologists Journal of Experimental Biology Traveling Fellowship, £3,000
2020	Friday Harbor Laboratories, Stephen and Ruth Wainwright Graduate Research Award, \$600
	(unable to use due to the pandemic)
2018	Sigma Xi, Grants-in-Aid of Research, \$993
2017	American Museum of Natural History, Lerner Gray Memorial Fund, \$2,000
2017	American Society of Ichthyologists and Herpetologists, Edward C. Raney Fund Award, \$1,000
2016	Research Triangle Nanotechnology Network (RTNN), Free-Use Fund Award, \$1,000
AWARDS	
2020	Executive Women of New Jersey, Graduate Award, \$5,000
2019	New Jersey Institute of Technology, Excellence in Instruction Award, \$1,500
2014	American Elasmobranch Society, Jeffrey & Carol Carrier Student Poster Award, \$300
2014	College of Charleston, Outstanding Graduate Scholar in Marine Biology
2013-2015	Society for Integrative and Comparative Biology, Charlotte Mangum Student Support Award
2012	College of Charleston, Student Research Colloquium Second Place Poster
2011	National Science Foundation, Honorable Mention, Graduate Research Fellowship Program
2010	University of Rhode Island, Alpha Award for achievement in research
2009	University of Rhode Island, Elmer A. Palmatier Award, \$250
CONFERENCE	E TRAVEL GRANTS
2023	Gupta College of Science Professional Activities Travel Grant, \$1027
2018	Carl Gans Collections and Charitable Fund, Conference Grant for JMIH, \$500
2017-2020	New Jersey Institute of Technology, Graduate Student Association Travel Award, \$3,600
2014	American Elasmobranch Society, Student Travel Award, \$625
2013-2014	College of Charleston, Graduate Program in Marine Biology Travel Award, \$750
2013	American Society of Ichthyologists and Herpetologists, Student Travel Award, \$300
2012-2014	College of Charleston, Office of Graduate Studies Research and Travel Grant, \$750
2012-2014	College of Charleston, Marine Biology Graduate Student Association Travel Award, \$300
2012-2013	College of Charleston, Graduate Student Association Research Presentation Grant, \$500
SCHOLARSHII	PS
2017	New Jersey Institute of Technology, Class of '58 Scholarship, \$4,030
2016-2018	New Jersey Institute of Technology, Provost Doctoral Assistantship Award, \$25,000/year
2010	Mote Marine Laboratory, Mote Marine Laboratory College Intern Scholarship, \$1,500
2009	University of Rhode Island, Mary Matzinger Merit Scholarship, \$1,000
2008	Foundation for Asia Pacific Education, Scholarship for Overseas Education, \$2,500
2007-2009	University of Rhode Island, Henry Davis Merit Scholarship, \$1,462
2006-2010	University of Rhode Island, Centennial Scholar, \$28,000

- Functional Morphology and Career Exploration, Louis Stokes-Louisiana Alliance for Minority Participation (LS-LAMP), University of Louisiana at Lafayette, Lafayette, LA (2023)
- Fish Form and Function, Biology Seminar, Coe College, Cedar Rapids, IA (2022)
- Form, Function, and Forbidden Phenotypes, Biology Seminar, Rhodes College, Memphis, TN (2021)
- These Fish Like to Move it (Move it): Morphology and Walking Kinematics in Balitorid Loaches, Virtual Seminar Series, University of Louisiana at Lafayette, Lafayette, LA (2021)
- These Fish Were Made for Walking, Virtual Seminar Series, University of Washington, Friday Harbor Laboratories, Friday Harbor, WA (2021)
- These Fish Were Made for Walking: Morphology and Walking Kinematics in Balitorid Loaches, Integrated Biology Seminar Series, University of Akron, Integrated Biosciences Department, Akron, OH (2021)
- The Waterfall Climbing Cavefish, Into the Darkness: Research and Conservation of Cave Organisms Across the Globe Outreach Event by the Metropolitan Society of Natural Historians at the American Museum of Natural History, New York, NY (2019)

#### **GUEST LECTURES**

- Fish Biomechanics, Animal Biomechanics, St. Mary's College, Notre Dame, Indiana (2022)
- *The Inner Ear: Hearing and Equilibrium*, General Physiology, University of Louisiana at Lafayette, Department of Biology, Lafayette, LA (2021)
- CT Scanning: A Modern Approach for Morphological Studies, Evolution and Diversity of Fishes, University of Rhode Island, Biology Department, Kingston, RI (2021)
- The Walking Cavefish, Ichthyology, Humboldt State University, Biology Department, Arcata, CA (2020)
- Walking Fish- They Like to Move it, But How? Biological Principles, College of the Holy Cross, Biology Department, Worcester, MA (2020)
- Chondrichthyan Diversity, Vertebrate Evolution, Rutgers University-Newark, Federated Biology Department, Newark, NJ (2019)

#### **ORAL PRESENTATIONS**

(\* DENOTES PRESENTING AUTHOR)

- Hawkins, O.H.,\* D. Kennedy, M. Vandeberg, R.C. Hoover, **C. Crawford,** T. Clardy, E. Kane, & C.M. Donatelli. (2023) *Society for Integrative and Comparative Biology*, Austin, TX- "To eel or not to eel: functional diversity of control surfaces in elongate fishes"
- Hoover, R.C.,\* O. Hawkins, J. Rosen, C. Wilson, C. Crawford, M. Holst, J. Huie, A. Summers, C. Donatelli, & K. Cohen. (2023) *Society for Integrative and Comparative Biology*, Austin, TX- "The hydrodynamic cost of armor and its tradeoff with adhesion across ontogeny in *E. orbis*"
- Huie, J.,\* C. Crawford, E. Kane, A. Evans, K. Cohen, T. Buser, & M. Kolmann. (2023) *Society for Integrative and Comparative Biology*, Austin, TX- "The enemy of your anemone: feeding kinematics and biomechanics of a narrow niche cnidarian nibbler"
- Amplo, H.E.\*, A. Camp, S. Harb, G, Sawiki, **C. Crawford**, & B. E. Flammang, (2022) *Society for Integrative and Comparative Biology*, Phoenix, AZ- "Using XROMM and Morphological Data to Assess Pronation in Frogfishes"
- **Crawford, C.H.**, C.L. Cerrato-Morales, Z.S. Randall, P.B. Hart, A. Webber-Schultz, L.M. Page, P. Chakrabarty, A. Suvarnaraksha, & B. E. Flammang. (2021) *Society for Integrative and Comparative Biology*, Virtual Conference- "Comparative Kinematics of Terrestrial Walking in Balitorid Loaches of Thailand,"
- **Crawford\*, C. H.** & B. E. Flammang. (2020) Rutgers- Newark and NJIT Biology Colloquium Series, Newark, NJ- "Little Fishy Steps to a PhD"
- **Crawford\***, **C. H.**, C. L. Cerrato-Morales, and B. E. Flammang. (2020) *Society for Integrative and Comparative Biology*, Austin, TX- "Comparative Kinematics of Terrestrial Walking in Two Balitorid Loaches"
- Biondi, A.A., H.E. Amplo, **C.H. Crawford\***, K.E. Bemis, & B.E. Flammang. (2020) *SICB*, Austin, TX-"Adventures in scaling & remodeled morphology: case of the Ocean Sunfish"

- Page\*, L., Z. Randall, P. Chakrabarty, P. Hart, C. Crawford, & B. Flammang. (2019) *Joint Meeting of Ichthyologists and Herpetologists*, Snowbird, Utah- "Evolution of Walking in Balitorid Loaches as a Model for Vertebrate Invasion of Land"
- Flammang\*, B.E., **C.H. Crawford**, D. Soares, A. Suvarnaraksha, P. Chakrabarty, P. Hart, L. Page, L & Z. Randall. (2019) *International Congress of Vertebrate Morphology*, Prague, Czech Republic- "Terrestrial Walking in Fishes with Tetrapod-like Skeletons"
- Biondi\*, A.A., K.E. Bemis, **C.H. Crawford**, & B.E. Flammang. (2019) *International Congress of Vertebrate Morphology* Prague, Czech Republic- "Adventures in Scaling & Remodeled Morphology: Case of the Ocean Sunfish"
- **Crawford\***, **C.H.**, & B.E. Flammang. (2019) *Evolution*, Providence, RI- "Walking Fishes and the Evolution of the Tetrapod Pelvic Girdle"
- **Crawford\***, **C.H.**, and B.E. Flammang. (2019) *NJIT-Rutgers University, Newark Graduate Student Research Day*, Newark, NJ- "Pelvic Morphology in the Balitorid Loaches"
- **Crawford\***, C.H., Z.S. Randall, P.B. Hart, L.M. Page, P. Chakrabarty, & B.E. Flammang. (2019) *Society for Integrative and Comparative Biology*, Tampa, FL- "The Muscles That Move The Fishes That Walk"
- Bernstein\*, J.M., C.H. Crawford, D.K. Wainwright, S. Ruane, & B.E. Flammang. (2019) *Society for Integrative and Comparative Biology*, Tampa, FL- "Snake Scale Keels: A Three-dimensional Investigation of Function"
- Cohen\*, K.E., L.P. Hernandez, **C. H. Crawford**, & B.E. Flammang. (2018) *Joint Meeting of Ichthyologists and Herpetologists*, Rochester, NY- "Modeling silver carp filtration using μCT and 3D PIV"
- Bernstein\*, J.M., **C.H. Crawford**, S. Ruane, & B.E. Flammang. (2018) *Joint Meeting of Ichthyologists and Herpetologists*, Rochester, NY- "Assessing the Functionality of Scale Keels in Reptiles"
- Cohen\*, K.E., L.P. Hernandez, C. H. Crawford, & B.E. Flammang. (2018) *Society for Integrative and Comparative Biology*, San Francisco, CA- "Secrets in master filtering: Using mu CT and 3D PIV to model Silver carp filter feeding"
- **Crawford\*, C.H.,** & B.E.Flammang, (2017) *Society for Integrative and Comparative Biology*, New Orleans, LA. "Skeletal Morphology of a Walking Cave Fish"
- Crawford\*, C.H., (2016) *Mid-Atlantic Regional SICB DVM/DCB Meeting*, Newark, NJ. "These fish were made for walking"
- Clark\*, A.J., C.H. Crawford, B.D. King, A.M. Demas, & Uyeno, TA. (2015) *Society for Integrative and Comparative Biology*, West Palm Beach, FL- "Material properties of hagfish skin with insights into knotting behaviors"
- Naylor\*, G.J.P., Corrigan, S., Marshall, L., **Crawford, C**, White, W.T., Last, P. and Davies, J. (2014) Sharks International, Durban, South Africa-"Putting Chondrichthyans on the map"
- **Crawford\***, C., and G. Naylor. (2014) *Joint Meeting of Ichthyologists and Herpetologists*, Chattanooga, TN-"Anatomical Characters as Informative Ornaments on the Chondrichthyan Tree of Life"
- Crawford\*, C., and G.J.P. Naylor. (2014) *Society for Integrative and Comparative Biology*, Austin, TX-"Evolution of the Skeleton in Chondrichthyan Fishes"
- **Crawford\***, C., and G.J.P. Naylor. (2013) *Joint Meeting of Ichthyologists and Herpetologists*, Albuquerque, NM- "Exploring Chondrichthyan Anatomy through Computed Tomography"

#### **POSTER PRESENTATIONS**

(\* DENOTES PRESENTING AUTHOR)

- **Crawford\***, **C.H.**, K. Smith, K. Evans, and E.A. Kane. (2022) *Society for Integrative and Comparative Biology*, Phoenix, AZ- "Three rivers diverged in the woods, and so did the guppies"
- Webber-Schultz\*, A.C., H.E. Amplo, **C.H. Crawford**, and B.E. Flammang (2022) *Society for Integrative and Comparative Biology*, Phoenix, AZ- "Comparative morphology of extant remora soft tissues"
- Crawford\*, C.H., P.B. Hart, Z.S. Randall, P. Chakrabarty, L.M. Page, and B.E. Flammang. (2019) *International Congress of Vertebrate Morphology*, Prague, Czech Republic- "The Road to a Phylogenomically-Based Bioinspired Robotic Model Approach to Address the Evolution of Terrestrial Locomotion"
- Biondi\*, A.A., K.E. Bemis, C.H. Crawford, and B.E. Flammang. (2019) Society for Integrative and

- Comparative Biology, Tampa, FL- "Mola mola Mismatched Muscle Mechanics"
- Amplo\*, H.E., **C.H. Crawford**, B.E. Flammang. (2019) *Society for Integrative and Comparative Biology*, Tampa, FL- "Head, Shoulders, Elbows, Fins: Frogfish Fin Morphology"
- **Crawford\***, **C.H.**, Z.S. Randall, and B.E. Flammang. (2018) *Joint Meeting of Ichthyologists and Herpetologists*, Rochester, NY- "These Fins Were Made for Walking: Tetrapodal Morphology of Balitorid Fishes"
- **Crawford\***, **C.H.**, Z.S. Randall, and B.E. Flammang. (2018) *Society for Integrative and Comparative Biology*, San Francisco, CA- "Variation in Pelvic Morphology of Balitorid Fishes"
- Crofts\*, S.B., **C. Crawford**, M. Bonnan, and B. Flammang. (2018) *Society for Integrative and Comparative Biology*, San Francisco, CA- "Skeletal morphology of swimming lizard tails"
- Gonzales\*, L.A., **C.H. Crawford**, J.T. Gladman, J.P. Alexander, J.I. Bloch, G.F. Gunnell, and D.M. Boyer. (2017) *American Association of Physical Anthropologists*, New Orleans, LA- "Documenting Skeletal Anatomy of Early Adapiforms"
- **Crawford\***, C., J. Denton, J. Maisey, and G. Naylor. (2015) *Interdisciplinary Approaches in Fish Skeletal Biology*, Tavira, Portugal- "Skeletal Anatomy in the Chondrichthyan Tree of Life"
- **Crawford\***, C., and G.J.P. Naylor. (2015) *Society for Integrative and Comparative Biology*, West Palm Beach, FL- "Skeletal Anatomy in the Chondrichthyan Tree of Life"
- **Crawford\***, C., C. Canstein, and G.J.P. Naylor. (2014) *Joint Meeting of Ichthyologists and Herpetologists*, Chattanooga, TN- "CT Scanning Chondrichthyans: No Bones About It"
- **Crawford\***, C., B. King, and A. Clark. (2013) *Society for Integrative and Comparative Biology*, San Francisco, CA- "Material Properties of Taut and Slack Skins in Elongate Fishes"
- **Crawford\***, C., T. Grothues and K. Able. (2009) Rutgers REU Presentation, New Brunswick, NJ-"Exploring Summer Flounder, *Paralichthys dentatus*, Carcass Behavior in Preparation for Discard Mortality Studies"

#### RESEARCH EXPERIENCE

#### Postdoctoral Research (2021-2022)

- Collected high-speed video of swimming and feeding in sculpin species of the Pacific Northwest
- $\bullet$  Collected  $\mu CT$  scans of various species of sculpins for ongoing research in development, swimming, and feeding
- Co-Wrote a funded Louisiana Board of Regents grant "Sculpting sculpins: form and function of pectoral fin specialization in intertidal fishes" alongside a graduate student and postdoctoral supervisor
- Mentored graduate and undergraduate students in developing thesis research directions and initial data collection

#### **Dissertation Research** (2016-2021)

- Dissertation research under NSF Understanding the Rules of Life grant #1839915
- Documenting specialized morphology in balitorid loaches, freshwater fishes of south and southeast Asia
- Using  $\mu$ CT to compare morphological differences related to terrestrial walking in fishes and tetrapods
- Determining the biomechanics of terrestrial walking in balitorid loaches:
  O Collecting and analyzing Kinematics, Electromyography, and force transmission data
- Spring 2020 fieldwork in Thailand to collect and film fish for kinematics
- Maintained lab collection of preserved fish and loans from various museums

#### **Associate in Research** in the Boyer Lab, Duke University (2015)

- Temporary position helping with completion of a grant on primate dental topography and morphology
- Completing MicroCT scans and segmentations of casts of extinct and extant primate teeth
- Completing MicroCT and medical CT scans of fossil primates for current research in the Boyer Lab

#### Research Assistant in the Naylor Lab, College of Charleston (2015)

- Segmenting CT scans of sharks, rays, and skates
- Scanning chondrichthyan specimens at the Medical University of South Carolina (MUSC)
- Mentoring undergraduate and graduate students
- Maintained lab collection of preserved sharks and loans from various museums

#### Master's Thesis Research (2011-2014)

- Surveyed skeletal variation among Chondrichthyan fishes, creating a comparative anatomical atlas
- Created over 100 3D digital segmentations from CT scans
- Noted patterns of chondrification and identified areas for future study

#### Visiting Graduate Student, the American Museum of Natural History (November 2013)

• Completed a portion of my thesis research under the mentorship of Dr. John Maisey

# Functional Morphology and Ecology of Marine Fishes, Friday Harbor Marine Laboratory (Summer 2012)

• Studied material properties of hagfish and gunnel skin

## Undergraduate Research with Dr. Cheryl Wilga, University of Rhode Island (2009-2010)

- Assisted graduate students with thesis and dissertation research in elasmobranch functional morphology
- Observed feeding behavior of newborn spiny dog fish pups

#### **Laboratory Technician**, Rutgers University Marine Field Station (Summer 2009)

• Assisted faculty and graduate students with summer flounder bycatch mortality studies

# NSF REU Participant, Rutgers University Marine Field Station (Summer 2009)

- Implemented a summer flounder research project with guidance from advisor
- Studied movement of tagged summer flounder carcasses as part of a larger discard mortality study

# Undergraduate Research with Dr. Evan Preisser, University of Rhode Island (2008-2010)

- Aided graduate students in hemlock woolly adelgid and hemlock scale research
- Identified arachnid species for species richness studies

#### **TEACHING EXPERIENCE**

## **Assistant Professor of Animal Biology**, Coastal Carolina University (2023-Present)

- Vertebrate Zoology, lab and lecture course (Biol 485/585 Fall 2023)
  - O Course includes senior undergraduate students and graduate students
- Biological Sciences II, lecture instructor (Biol 122, Fall 2023)
  - o 2<sup>nd</sup> sequence in a two-semester introductory biology course, focus on evolution, organisms, and ecology

# Instructor of Record, University of Louisiana at Lafayette (2022-Present)

- Estuarine Ecology and Marine Coastal Biology, lab and lecture course (Bio 440, Fall 2022 & Spring 2023)
- General Physiology Lecture (Bio 325, Spring 2023)
- Graduate Seminar: Embrace Your Inner Fish; seminar developed by C. Crawford (Bio 552, Fall 2022)
- Undergraduate Senior Seminar (Bio 452, Fall 2022)
- General Physiology Lab Coordinator (Bio 325, Fall 2022 & Spring 2023)
- General Physiology Lab Instructor (Bio 325, Fall 2022)

#### Teaching Assistant, NJIT (2016-2018)

- Planned, prepared, and graded laboratory lectures, quizzes, and practical examinations
  - o Comparative Vertebrate Anatomy (Fall 2016, Fall 2017, Fall 2018)
  - o Foundations in Ecology and Evolution (Spring 2017)
  - o Ecological Field Methods- Honors (Summer 2017 and 2018)
  - o Mammalian Physiology (Spring 2018)
  - o Evolution of Animal Behavior-Honors (Summer 2018)

## **Teaching Assistant,** College of Charleston Department of Biology (2011-2012)

- Planned and presented lectures and administered quizzes and practical examinations
  - O Concepts and Application in Biology (Fall 2011)
  - o Evolution, Form, and Function of Organisms (Spring 2012)

#### **Supplemental Instruction Leader, University of Rhode Island (2010)**

• Conducted twice-weekly tutoring, study skills, and review sessions for students in an introductory biology course with a historically high fail rate

#### WORK EXPERIENCE (NON-RESEARCH)

#### **R&D Engineer II** in the Shared Materials Instrumentation Facility (SMIF), Duke University (2015)

- Assisted in the operation and maintenance of the MicroCT scanner
- Trained users on the use of the MicroCT Facility

Performed MicroCT scans and reconstructions for internal and external users

Administrative Assistant, Riverlands Marine Surveyors, Louisville, KY (Spring 2011)

- Processed barge draft surveys, time sheets, and invoices
- Finalized survey reports and Maintained database records.

## **Animal Rehabilitation Intern**, Mote Marine Laboratory (2010-2011)

- Assisted with rehabilitation of sea turtles and cetaceans through basic husbandry and animal care
- Maintained water quality and habitats and assisted with veterinary procedures

#### Marine Naturalist Intern, Port Townsend Marine Science Center (2010)

- Led hands-on education programs in marine science, natural history, and conservation
- Maintained tanks on a cold-water flow-through system and cared for animals in exhibits
- Worked with the volunteer docent team to interpret exhibits for the public
- Assisted with the marine mammal stranding network.

#### MENTORSHIP AND LEADERSHIP ROLES

**SEEDS (Strategies for Ecology Education, Diversity and Sustainability) Chapter,** Faculty Mentor, University of Louisiana (2022-2023)

**Ad-Hoc Committee on Diversity, Equity, and Inclusion**, founding member of the departmental committee on diversity and inclusion in Biology at the University of Louisiana (2022-2023)

Student Support Committee Member, Society for Integrative and Comparative Biology (2022-2025)

Colloquium Committee, Biology Student Leadership, Federated Department of Biology (2019-2020)

• Work with other committee members to facilitate organization of weekly Biology seminars and end of the year research day highlighting student research

Honors Thesis Mentor, New Jersey Institute of Technology (2017-2018)

• Mentored an undergraduate student completing her Honors Thesis

**High School Mentor,** New Jersey Institute of Technology (2017)

• Mentored two high school interns as part of the NJIT Provost High School Summer Research Interns

President, United Council of Academics at NJIT (UCAN), Graduate Student and Research Staff Union (2017)

NJIT Union Liaison, Biology Student Leadership, Federated Department of Biology (2016-2017, 2018-2019)

**Undergraduate Mentor,** New Jersey Institute of Technology (2016, 2018-2021)

- Mentored undergraduate researchers
  - CT scan reconstruction of remora cranial musculature
  - Digitization of high-speed video
  - CT scan reconstruction of fish skeletal morphology

## **Undergraduate Mentor,** College of Charleston (2013-2015)

• Mentored an undergraduate researcher on her Bachelor's Thesis, Comparative anatomical study of evolutionary variation in Sphyrnidae, Hammerhead sharks, using 3-D modeling

NSF REU Mentor, College of Charleston (2014)

• Mentored an REU participant on her project, Evolution of Head Size in Hammerhead Sharks

#### **High School Mentor,** College of Charleston (2013)

• Mentored as honors student on his project, CT scan segmentation of an Angel shark, Squatina japonica

Treasurer, Marine Biology Graduate Student Association Treasurer (2012-2013), member (2011-2014)

**URI 101 Mentor**, University of Rhode Island (2007, 2009)

- Mentored two classes of freshmen marine biology majors during a 1-credit seminar course
- Provided leadership and guidance to first year students

Mentor, We're Offering Women Wisdom (WOWW) (2006-2010)

# SOCIETY MEMBERSHIPS

2020-2023	International Women in Biomechanics, IWB
2019	Association for Women in Science, AWIS
2019	American Association for the Advancement of Science, Program for Excellence in Science
2019	Society for the Study of Evolution
2012-2023	Society for Integrative and Comparative Biology
2012-2019	Association of Ichthyologists and Herpetologists
2012-2018	American Elasmobranch Society
2012-2014/	
2016-2019	Sigma Xi

# PROFESSIONAL SERVICE, COMMUNITY SERVICE, AND OUTREACH

Reviewer:	Scientific Reports, Copeia (now Ichthyology and Herpetology), Journal of Morphology, Integrative and Comparative Biology, Zoomorphology
2023	MISS (Minorities in Shark Sciences) Surviving Graduate School Q&A Panelist (2 <sup>nd</sup> iteration of panel)
2022-2025	Student Support Committee member, Society for Integrative and Comparative Biology
2022-2023	Volunteer Judge, Louisiana Region VI Science and Engineering Fair
2022-2023	MISS (Minorities in Shark Sciences) Conference101 Q&A Panelist (2 <sup>nd</sup> iteration of panel)
2022	Expert volunteer for the Division of Phylogenetics & Comparative Biology "Ask-An-Expert" booth at the 2022 Society for Integrative and Comparative Biology meeting
2022	Code of Conduct Safety Ally for the 2022 SICB meeting
2021-2023	Skype-A-Scientist scientist volunteer- Video chats/discussions/lectures with K-12 classes across
	the USA and internationally (14 classes/public libraries)
2021	MISS (Minorities in Shark Sciences) Conference101 Q&A Panelist
2021	MISS (Minorities in Shark Sciences) Surviving Graduate School Q&A Panelist
2020-2022	Friend of MISS (Minorities in Shark Sciences)
2020	Department Ambassador to the NJIT Board of Visitors
2019 & 2020	NJIT Teaching and Communication Skills Workshop, Teaching Panelist
2019	Code of Conduct Liaison for the 2019 International Congress on Vertebrate Morphology
2019	Lecture organizer for a visiting scholar at NJIT/Rutgers-Newark
2019	Career Day Presenter at Martin Luther King School (13th School) in Newark, NJ
2018-2019	Rutgers Day Department of Biology Volunteer
2018	Rutgers University-Newark Food Drive
2017-2018	NJIT open house and welcome day volunteer
2011-2015	Habitat for Humanity, Charleston, SC
2011-2014	Road and Beach Cleanups in Charleston, SC

# LICENSES, CERTIFICATIONS, TRAININGS, ETC.

2023	Adult Mental Health First Aid, National Council for Mental Wellbeing
	(University of Louisiana at Lafayette)
2022	QPR Suicide Prevention training from the Jacob Grouch Suicide Prevention Services (University
	of Louisiana at Lafayette)
2022	Project ALLIES LGBTQ+ Allyship Workshop (University of Louisiana at Lafayette)
2022	Trained User: SKYSCAN 1173 High Speed MicroCT scanner, University of Washington, Friday
	Harbor Labs
2021	edX: The Inclusive STEM Teaching Project Certification
2019	SlicerMorph: 3d Morphometrics and Image Analysis Intense Summer Workshop, University
	of Washington
2017	Trained User: SKYSCAN 1275 High Speed MicroCT scanner, NJIT
2015	Trained User: XTEK XT H 225ST MicroCT scanner, Duke University
2013	CFR/ATA Dangerous Goods Transportation Training, College of Charleston
2012-2022	User and training in CT scan segmentation using Mimics by Materialise, College of Charleston,

NJIT, and external mentees PADI SCUBA:

2013	AWARE Specialty
2007	Advanced Open Water

2006 Open Water