JOHN E. MAJORIS

TEXAS A&M UNIVERSITY-CORPUS CHRISTI

COLLEGE OF SCIENCE | DEPARTMENT OF LIFE SCIENCES

TIDAL HALL, 6300 OCEAN DRIVE, UNIT 5800 | CORPUS CHRISTI, Texas 78412 USA

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CURRENT POSITION

2023 - present Assistant Professor of Marine Biology, Texa	s A&M University Corpus Christi
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EDUCATION

2017	Ph.D. in Biology, Boston University Dissertation title: An integrative investigation of larval behavior using a coral reef fish. Advisors: Drs. Jelle Atema and Peter Buston
2009	Dual B.Sc. in Marine Biology and Aquaculture, Florida Institute of Technology <i>Advisor:</i> Dr. Ralph Turingan

ACADEMIC APPOINTMENTS

2022 - 2023	Research Scientist , University of Texas at Austin Marine Science Institute <i>Topic:</i> Influence of variation in dispersal traits on reef fish community structure. <i>Supervisor:</i> Dr. Simon Brandl
2021 - 2022	Postdoctoral Fellow , University of Texas at Austin Marine Science Institute <i>Topic:</i> Interspecific variation in dispersal traits of reef fish larvae. <i>Supervisor:</i> Dr. Simon Brandl
2019 - 2021	Postdoctoral Fellow , King Abdullah University of Science and Technology (KAUST) <i>Topic:</i> Differential gene expression related to dispersal traits of reef fish larvae. <i>Supervisor:</i> Dr. Michael Berumen
Fall 2018	Lecturer, Boston University Marine Program Course: BI 529-Tropical Marine Fisheries
2017 - 2018	Postdoctoral Associate, Boston University Topic: Ontogeny of orientation behavior of reef fish larvae. Supervisor: Dr. Peter Buston

AWARDS & HONORS

2015	Doctoral Dissertation Improvement Grant (DDIG), National Science Foundation	
2015	First Place, Poster Presentation, Biology Graduate Student Research Symposium, Boston University	
2012	Outstanding Teaching Fellow, Boston University Marine Program, Boston University	
2009	First Place, Poster Presentation in Biological Science, Florida Academy of Science	
2009	Second Place, Overall Poster Presentation, Florida Academy of Science	
2009	Outstanding Senior, Marine Biology and Aquaculture, Florida Institute of Technology	
GRANTS & FELLOWSHIPS (TOTAL: \$210,448)		

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2020	Capital Equipment Grant, Academic Space and Equipment Planning Committee, KAUST (\$90,093)
2018	Oboh-Weilke Postdoctoral Travel Award, Boston University (\$1,000)
2017	Postdoctoral Funding, Boston University and the National Science Foundation, OCE-1459546 (\$47,000)
2017	Open Access Publication Grant, Dr. Junda Lin Memorial Fund, MASNA (\$1,500)
2015	Doctoral Dissertation Improvement Grant (DDIG), National Science Foundation, IOS-1501651 (\$16,355)

- 2014 Travel Grant, Biology Graduate Student Association, Boston University (\$250)
- 2014 Travel Grant, Society for Integrative and Comparative Biology (\$1,500)
- 2013 Warren-Mcleod Full-Year Research Fellowship (2013 2014), Boston University (\$20,500)
- 2012 Dana Wright Research Scholarship, Boston University (\$10,250)
- 2011 Warren-Mcleod Summer Research Fellowship, Boston University (\$10,250)
- 2010 Warren-Mcleod Summer Research Fellowship, Boston University (\$10,250)
- 2010 Lerner-Grey Marine Research Grant, American Museum of Natural History (\$1,500)

PUBLICATIONS (TOTAL: 23 | CITATIONS: 534 | H-INDEX: 11)

- * Co-first Authors, * Mentored Undergraduate Student Co-Authors, § Mentored Graduate Student Co-Authors
- 23. Pacaro, M. *§, T. Barbasch, M Rogers, J. Chavez, P.M. Buston, **J.E. Majoris**. (Accepted) Nocturnal parental care and the role of parents in hatching in the clownfish *Amphiprion percula*. *Ethology*.
- 22. Hu, Y., **J.E. Majoris**, P.M. Buston, J.F. Webb. (2022) Ear development in selected coral reef fishes: clues for the role of hearing in larval orientation behavior? *Ichthyology and Herpetology*. 110(4):759-775.
- 21. Francis, R.K.\(\frac{8}{2}\), K. Catalano\(\frac{8}{2}\), **J.E. Majoris**, S.M. Bogdanowicz, C.C. D'Aloia, T. Rueger, P.M. Buston. (2022) Characteristics of breeding habitat, genetic mating system, and determinants of mating success in the sponge-dwelling goby *Elacatinus lori*. *Behavioral Ecology and Sociobiology*. 76:57.
- 20. Fitzgerald, L.M. §, H.B. Harrison, D.J. Coker, P. Saenz-Agudelo, M. Srinivasan, **J.E. Majoris**, L. Boström Einarsson; B. Pujol; M. Bennett-Smith§; S.R. Thorrold; S. Planes; G.P. Jones; M.L. Berumen. (2022) Rank change and growth within social hierarchies of the orange clownfish, *Amphiprion percula*. *Marine Biology* 169:128.
- 19. **Majoris, J.E.,** F.A. Francisco*, C. Burns*, S.J. Brandl, K.M. Warkentin, P.M. Buston. (2022) Paternal care regulates the timing, synchrony, and success of hatching in a coral reef fish. *Proceedings of the Royal Society B*. 289: 20221466.
- 18. Chahid, A. §, I. N'Doye, **J.E. Majoris**, M.L. Berumen, T. Laleg-Kirati. (2021) Fish growth trajectory tracking using Q-learning in precision aquaculture. *Aquaculture* 550: 737838.
- 17. Bennett-Smith, M.F. §, **J.E. Majoris**, B. Titus, M.L. Berumen. (2021) Clownfish-hosting sea anemones (Anthozoa, Actiniaria) of the Red Sea: new associations and distributions, historical misidentifications, and morphological variability. *Marine Biodiversity Records* 14(22): 1-15.
- 16. Chahid, A.\(\frac{\mathbb{8}}{2}\), I. N'Doye, **J.E. Majoris**, M.L. Berumen, L. Taous-Meriem. (2021) Model predictive control paradigms for fish growth reference tracking in precision aquaculture. *Journal of Process Control* 105:160-168.
- 15. **Majoris, J.E.,** M.A. Foretich, Y. Hu, K.R. Nickles, C.L. Di Persia, R. Chaput, E Schlatter, J.F. Webb, C.B. Paris, P.M. Buston. (2021) An integrative investigation of sensory organ development and orientation behavior in the larvae of a coral reef fish. *Scientific Reports* 11: 12377.
- Gajdzik, L., T.M. DeCarlo, E.A. Aylagas, D.J. Coker, A. Green, J.E. Majoris, V.F. Saderne, S. Carvalho, M.L. Berumen. (2021) Tailoring marine conservation to enhance climate change mitigation and adaptation. Global Change Biology 00: 1-13.
- 13. Nickles, K.R., Y. Hu, **J.E. Majoris**, P.M. Buston, J.F. Webb. (2020) Organization and ontogeny of a complex lateral line system in a goby (*Elacatinus lori*), with a consideration of function and ecology. *Copeia* 108 (4): 863-885. *Awarded 2020 Best Paper in Ichthyology in Copeia*.
- 12. **Majoris, J.E.,** K.A. Catalano*, D. Scolaro*, J. Atema, P.M. Buston. (2019) Ontogeny of swimming abilities of larval coral reef fishes and a hypothesis for their impact on the spatial scale of dispersal. *Marine Biology* 166(12): 159.
- 11. Chaput, R., **J.E. Majoris**, P.M. Buston, C.B. Paris. (2019) Hydrodynamic and biological constraints on group cohesion of larvae through ontogeny. *Journal of Theoretical Biology* 482: 109987.

- 10. Chaput, R., **J.E. Majoris**, C.M. Guigand, M. Huse, E.K. D'Alessandro. (2019) Environmental conditions and parental care determine hatching synchronicity of coral reef fish larvae. *Marine Biology* 166(9): 118.
- 9. Reed, C.*, R. Branconi, **J.E. Majoris**, C. Johnson, P.M. Buston. (2019) Competitive growth in a social fish. *Biology Letters* 15(2): 20180737
- 8. Hu, Y., **J.E. Majoris**, P.M. Buston, J.F. Webb. (2018) Potential roles of smell and taste in the orientation behavior of coral reef fish larvae: insights from morphology. *Journal of Fish Biology* 95: 311-323 *Special Issue on the Sensory Ecology of Fishes*.
- 7. **Majoris, J.E.**, C.C. D'Aloia, R.K. Francis* and P.M. Buston. (2018) Differential persistence favors habitat preferences that determine the distribution of a reef fish. *Behavioral Ecology* arx189.
- 6. **Majoris, J.E.**, F.A. Francisco*, J. Atema, P.M. Buston. (2018) Reproduction, early development, and larval rearing strategies for two sponge-dwelling neon gobies, *Elacatinus lori* and *E. colini*. *Aquaculture* 483: 286-295.
- 5. D'Aloia, C.C., S.M. Bogdanowicz, R.K. Francis*, **J.E. Majoris**, R.G. Harrison, P.M. Buston. (2015) Patterns, causes, and consequences of marine larval dispersal. *PNAS* 112(45): 13940-13945.
- 4. D'Aloia, C.C., S.M. Bogdanowicz, **J.E. Majoris**, R.G. Harrison and P.M. Buston. (2013) Self-recruitment in a Caribbean reef fish: a method for approximating dispersal kernels accounting for seascape. *Molecular Ecology* 22(9): 2563-2572.
- 3. D'Aloia, C.C., **J.E. Majoris** and P.M. Buston. (2011) Predictors of the distribution and abundance of a tube sponge and its resident goby. *Coral Reefs* 30: 777-786.
- 2. Long, W.C., J.N. Grow, **J.E. Majoris**, A.N. Hines. (2011) Effects of anthropogenic shoreline hardening and invasion by *Phragmites australis* on habitat quality for juvenile blue crabs (*Callinectes sapidus*). *Journal of Experimental Marine Biology and Ecology* 409(1-2): 215-222.
- 1. Anto, J., **J.E. Majoris**, R.G. Turingan. (2009) Prey selection and functional morphology through ontogeny of *Amphiprion clarkii* with a congeneric comparison. *Journal of Fish Biology* 75: 575-590.

MANUSCRIPTS IN REVIEW

- 202x **Majoris, J.E.**, Foretich, M.A., R. Chaput, C.L. Di Persia*, E. Schlatter, P.M. Buston, C.B. Paris. Does larval fish orientation behavior depend on ecological context? (Manuscript available upon request)
- 202x **Majoris, J.E.***, M.S. Justo[§], M.L. Berumen. Pseudochromid culture: standard rearing protocol, developmental timing, and survival bottlenecks for three pseudochromids endemic to the Red Sea. (Manuscript available upon request)

TECHNICAL REPORTS

1. **Majoris, J.**, Bojko, J., Branconi, R., Scavo, K., Lesneski, K., Jennings, L., *Tropical Marine Fisheries Course Students**, Beringer, D., Rotjan, R. (2019) Causes and Consequences of Spiny Lobster Mortality at Fishing Camps on Turneffe Atoll. *Report to the Belizean Fisheries Department. (Available upon request)*

INVITED SEMINARS

- When do larvae develop the sensory systems, swimming abilities, and orientation behaviors that could allow them to influence their dispersal?

 Stengl-Wyer Fellows Luncheon, University of Texas at Austin, Austin, TX.
- Evaluating the role of larval behavior in determine the pattern of dispersal in a coral reef fish. Department of Life Sciences, **Texas A&M Corpus Christi, Corpus Christi, TX**.
- Evaluating the role of larval behavior in determine the pattern of dispersal in a coral reef fish. Department of Biological Sciences, **University of Alabama**, **Dauphin Island**, **AL**.
- An integrative investigation of the dispersal traits of reef fish larvae.

 Department of Natural Sciences, University of Maryland Eastern Shore, Princess Anne, MD.

- Leveraging aquaculture to study the dispersal traits of coral reef fish larvae.

 School of Marine and Environmental Programs, **University of New England, Biddeford, ME**.
- When do larvae develop the sensory systems, swimming abilities, and orientation behaviors that could allow them to influence their dispersal?
 Marine Science Institute, University of Texas at Austin, Port Aransas, TX.
- The early ontogeny of sensory systems and dispersal behavior of *Elacatinus lori*: can reef fish larvae influence their dispersal?

 Smithsonian Virtual Ichthyology Seminar Series, **Smithsonian Institute**, **Washington**, **DC**.
- An integrative investigation of the dispersal and settlement behaviors of reef fish larvae.

 Red Sea Research Center, **King Abdullah University of Science and Technology, Saudi Arabia.**
- An integrative investigation of the dispersal and settlement behaviors of reef fish larvae.

 Department of Ecology and Evolutionary Biology, **University of California, Irvine, CA.**

CONTRIBUTED PRESENTATIONS

- 2023 Parental care regulates hatching time and hatchling morphology in a coral reef fish.

 Society of Integrative and Comparative Biology, Austin, TX.
- Neon goby larvae have sufficiently developed sensory systems and swimming abilities to orient directionally beginning shortly after hatching.
 Society of Integrative and Comparative Biology, Austin, TX.
- 2019 Larval orientation behavior begins shortly after hatching and may contribute to restricted dispersal in a coral reef fish.

43rd Larval Fish Conference, Palma, Spain.

- Differential persistence favors habitat preferences that determine the distribution of a reef fish. 42nd Larval Fish Conference, Victoria, Canada.
- Larval orientation behavior begins shortly after hatching in a coral reef fish. **42**nd Larval Fish Conference, Victoria, Canada. (*Poster*)
- Differential persistence favors habitat preferences that determine the distribution of a reef fish. Society of Integrative and Comparative Biology, San Francisco, CA.
- Ontogeny of swimming abilities of larval coral reef fishes and a hypothesis for their impact on the spatial scale of dispersal.

 Indo-Pacific Fish Conference, Tahiti, French Polynesia.
- The tortoise and the hare: development of maximum and endurance swimming abilities in the larvae of two coral reef fishes with short distance dispersal.

 Society of Integrative and Comparative Biology, Portland, OR.
- Hatching plasticity in a coral reef fish: the patterns, causes and consequences of hatching early. Society of Integrative and Comparative Biology, West Palm Beach, FL.
- Habitat preferences at settlement help to explain the distribution of a coral reef fish on sponge habitat. Biology Graduate Student Research Symposium, Boston University, MA. (*Poster*)
- The role of sensory behavior in fine-scale habitat selection by reef fish larvae.

 Society of Integrative and Comparative Biology, University of Texas Austin, TX.
- Habitat preferences at settlement help to explain the distribution of a coral reef fish on sponge habitat. **International Society for Behavioral Ecology, New York University, NY.** (*Poster*)
- 2013 Ontogeny of olfactory orientation behavior in reef fish larvae.

 Warren-Mcleod Fellowship Symposium, Boston University, MA.
- The role of sensory behavior in habitat selection and distribution of settlement stage larvae of the sponge goby, *Elacatinus lori*.
 SeaBASS Underwater Bioacoustics Workshop, Penn State University, PA. (*Poster*)

The effects of induced early hatching on the ontogeny of sensory systems and swimming abilities in larvae of the sponge-dwelling neon goby, *Elacatinus lori*.

Warren-Mcleod Fellowship Symposium, Boston University, MA.

- The effects of shoreline type on diet and growth of juvenile blue crabs, *Callinectes sapidus*. Engineering & Science Student Showcase, Florida Institute of Technology, FL. (*Poster*)
- 2009 Linking form and function in *Amphiprion frenatus* fish larvae. **Florida Academy of Science, Saint Leo University, FL.** (*Poster*)
- The effects of shoreline type on growth and diet of juvenile blue crabs, *Callinectes sapidus*.

 Smithsonian Environmental Research Center, Edgewater, MD.
- 2007 Effects of hyperoxia on juvenile and market size aquacultured Florida pompano, *Trachinotus carolinus*. **Harbor Branch Oceanographic Institute**, **Florida Atlantic University**, **FL**.

TEACHING EXPERIENCE (COURSES: 7 | SEMESTERS: 12)

FIELD COURSES: SEMESTERS TAUGHT: POSITION:

BI 529: Tropical Marine Fisheries (Belize) Fall 2018 Lecturer, Boston University

Responsibilities: Sole instructor, course design, lecturing, grading, local and international field trip planning, student field research project development, organization of field activities and permits.

MR 533: AAUS Scientific Diving (USA) Fall 2018 Assistant Instructor, Boston University *Responsibilities:* Course design, lecturing, skills demonstrations, field practical development, supervision of field activities and safety.

MR 533: AAUS Scientific Diving (USA) Fall 2013 & 2014 **Teaching Assistant**, Boston University *Responsibilities:* Lecturing, skills demonstration, field practical development, organization of field activities.

BI 539: Coral Reef Dynamics (Belize) Fall 2012 **Teaching Assistant**, Boston University *Responsibilities:* Student project development, freediving skills demonstration, organization of field activities.

LECTURE AND LAB COURSES: SEMESTERS TAUGHT: POSITION:

BI 260: Marine Biology Spring 2011 & 2012 **Teaching Assistant**, Boston University *Responsibilities:* Course design, lecturing, exam development, grading, discussion facilitator.

BI 536: Sensory Biology Fall 2010, 2011 & 2012 **Teaching Assistant**, Boston University *Responsibilities:* Lecturing, grading, student research project development, organization of field labs.

BI 315: Systems Physiology Spring 2010 **Teaching Assistant**, Boston University *Responsibilities:* Laboratory briefings, lab management and organization, exam proctoring, grading.

BI 107: Introductory Biology Fall 2009 **Teaching Assistant**, Boston University *Responsibilities:* Laboratory briefings, lab management and organization, exam proctoring, grading.

SCUBA INSTRUCTOR: YEARS TAUGHT: POSITION:

NAUI Assistant SCUBA Instructor 2014 – 2018 Assistant Instructor, Boston University

SSI Level 1 Freediving Instructor 2014 – 2018 Instructor, East Coast Divers

GUEST LECTURES

- The early life history and dispersal of coral reef fishes. Fish Biology, The University of Texas at Austin, TX.
- Parental care regulates hatching time and hatchling morphology in a coral reef fish. Evolution and Diversity of Fishes Course, University of Rhode Island, RI.
- 2023 Recirculating aquaculture systems (RAS)
 Principles of Aquarium Science Course, University of New England, ME.
- The early ontogeny of dispersal phenotypes: can reef fish larvae influence their dispersal? Evolution and Diversity of Fishes Course, University of Rhode Island, RI.

2021	The early ontogeny of sensory systems and dispersal behavior of <i>Elacatinus lori</i> : can reef fish larvae influence their dispersal? Ichthyology Course, University of Rhode Island, RI.
2021	Cracking open the black box of larval dispersal: methodology for studying larval fish ecology. Evolution and Diversity of Fishes Course, University of Rhode Island, RI.
2020	Emerging methods for evaluating the larval behavior of coral reef fishes. Diversity and Identification of Larval Fishes Workshop, Oregon State University, OR.
2018	Cracking open the black box of larval dispersal. Evolution and Diversity of Fishes Course, University of Rhode Island, RI.
2016	Ontogeny of swimming speed in the larvae of two coral reef fishes with short distance dispersal. Marine Biology Course, Boston University, MA.
2014	Ontogeny of olfactory orientation behavior in reef fish larvae. Marine Biology Course, Boston University, MA.

PEDAGOGICAL TRAINING

- 2014 An introduction to evidence-based undergraduate STEM teaching, Boston University
- 2009 Pedagogy for teaching fellows in biology, Boston University

RESEARCH SUPERVISION AND MENTORSHIP

[†] Mentees Now Pursuing a PhD, * Mentees Now Pursuing a MSc, ^o Mentees Now Employed in a STEM Field **DOCTORAL STUDENTS MENTORED:** (TOTAL: 5 STUDENTS)

2021 - Present	Hannah Rempel	PhD dissertation research on trophic ecology of fishes, UTMSI
2020 - Present	Fahad Aljehani	PhD dissertation on computer vision for smart aquaculture, KAUST
2021 - Present	Micaela Justo [♦]	PhD dissertation on effects of oil exposure on gene expression KAUST
2015 - 2023	Robin Francis ^o	PhD dissertation fieldwork planning and competition, BU
2019 - 2021	Abderrazak Chahido	PhD dissertation on control algorithms for smart aquaculture, KAUST

MASTER'S STUDENTS MENTORED: (TOTAL: 4 STUDENTS)

2020 - 2023	Madison Pacaro ^o	MSc thesis on nocturnal parental care in coral reef fishes, BU
2019 - 2021	Micaela Justo [♦]	MSc thesis on ontogeny of gene expression in reef fish larvae, KAUST
2019 - 2020	Morgan Bennett-Smith ⁶	MSc thesis on the distribution of Red Sea anemones, KAUST
2019 - 2020	Lucy Fitzgerald [♦]	MSc thesis on habitat quality and persistence of clownfish, KAUST

Undergraduate students mentored: (total: 11 students)

2022 - 2023	Isabel Grudowski	Independent research on ingress of fish larvae through inlets, UTMSI
2017 - 2018	Juan Chavez Andonie ^o	Senior thesis on hatching behavior of reef fishes, BU
2017 - 2018	Cymone Reed ^o	Senior thesis on competitive growth in clownfish, BU
2016 - 2018	Sadie Thompson ^o	Senior thesis on dispersal traits of reef fish larvae, BU
2014 - 2017	Alexander Ascher ^o	Independent research in marine ornamental aquaculture, BU
2012 - 2016	Katrina Catalano ⁶	Senior thesis on endurance swimming of larval reef fishes, BU
2014 - 2015	Fritz Francisco [†]	Senior thesis on hatching plasticity of a coral reef fish, BU
2012 - 2015	James Ferrito ^o	Independent research on the habitat preferences of gobies, BU

2012 - 2014	Derek Scolaro ^o	Senior thesis on the swimming speed of larval reef fishes, BU
2012 - 2013	Corinne Burns ^{\phi}	Senior thesis on the hatching plasticity of coral reef fishes, BU
2011 - 2012	Becky Atwood ^o	Independent research in marine ornamental aquaculture, BU

EDUCATIONAL OUTREACH

2020	Lectured on 'Everything you need to know about clownfish', Jeddah Dive Club
2020	Sponsored a high school intern, The KAUST School
2019	Organized lab tour and educational activity for 120 kindergarten students, The KAUST School
2018	Organized lab tour and panel on college admissions for 90 seventh grade students, Roxybury Prep
2017	Lectured on 'AAUS Scientific Diving: Dive! Dive! Dive!, BU Open Water Diver Course
2016	Mentored high school student science fair projects, Cambridge Science Club for Girls
2013	Lectured on 'Ontogeny of olfactory behavior in reef fish larvae', BU Marine Science Association
2012	Lectured on 'How to find and apply for research internships', BU Marine Science Association
2011	Lectured on 'How nemo finds his home' to 30 third grade students, British School of Boston

SYMPOSIUM ORGANIZATION AND PARTICIPATION

- Patterns, causes and consequences of intraspecific variation in marine larval dispersal and population connectivity. (Symposium Co-organizer)
 International Coral Reef Symposium, Bremen, Germany.
- Impacts of extreme weather on benthic ecosystems. (Session Moderator)

 Texas Benthic Ecology Meeting, Port Aransas, TX, USA.

WORKSHOP ORGANIZATION AND PARTICIPATION

- 2022 Red Sea ichthyoplankton identification (Organizer), KAUST, Saudi Arabia.
- 2019 **Ichthyoplankton identification** (*Participant*), Oregon State University, USA.
- 2019 Writing ethics (Participant), Palma, Spain.
- 2018 Larval fish identification (Participant), Victoria, Canada.
- 2017 Integrating data on larval dispersal (Participant), CRIOBE, French Polynesia.
- 2012 SeaBASS underwater bioacoustics (Participant), Penn State University, USA
- 2010 Encyclopedia of life: deep sea fishes (Participant), Harvard University, USA.

AD HOC PEER-REVIEW

Behavioral Ecology (x1), Canadian Journal of Zoology (x1), Coral Reefs (x2), Ecology and Evolution (x1), Environmental Biology of Fishes (x1), Evolution & Development (x1), OIKOS (x1), Journal of Fish Biology (x2), Journal of the Marine Biological Association UK (x1), Marine Biology (x1), Marine Ecology (x1)

DEPARTMENTAL SERVICE

2013 - 2014 Graduate Student Representative, Dive Control Board, Boston University

PROFESSIONAL EXPERIENCE

2008 Research Experience for Undergraduates (REU) Intern, Marine and Estuarine Ecology Laboratory

Smithsonian Environmental Research Center, Edgewater, MD.

Topic: The effects of shoreline type on growth and diet of juvenile blue crabs, Callinectes sapidus.

Supervisor: Dr. Anson Hynes

2007 Research Experience for Undergraduates (REU) Intern, Aquaculture Division

Harbor Branch Oceanographic Institute, Fort Pierce, FL.

Topic: Effects of hyperoxia on aquacultured Florida pompano, Trachinotus carolinus.

Supervisor: Dr. Paul Wills

2006 - 2009 Research Assistant, Fish Ecophysiology Laboratory

Florida Institute of Technology, Melbourne, FL.

Topic: Prey selection and functional morphology through ontogeny of Amphiprion clarkii.

Supervisor: Dr. Ralph Turingan

FIELD EXPERIENCE (FIELD TIME: 32.5 MONTHS; SHIP TIME: 3.5 MONTHS; RESEARCH DIVES: >1500 DIVES)

2022	Saudi Arabia	1 month	Research Cruise Organizer
2022	Australia	1 month	AAUS Dive Supervisor
2020	Saudi Arabia	1 month	AAUS Dive Supervisor
2019	Papua New Guinea	2 weeks	AAUS Dive Supervisor
2019	Saudi Arabia	2 weeks	AAUS Dive Supervisor
2018	Belize	2 weeks	Field Course Instructor
2017	Belize	1.5 months	AAUS Dive Supervisor
2016	Belize	4 months	AAUS Dive Supervisor
2015	Belize	4 months	AAUS Dive Supervisor
2014	Belize	2 weeks	AAUS Dive Supervisor
2013	Belize	4 months	AAUS Dive Leader
2012	Belize	1 month	AAUS Dive Leader
2011	Belize	4 months	AAUS Research Diver
2011	Australia	1.5 months	AAUS Research Diver
2010	Belize	1.5 months	AAUS Research Diver

CERTIFICATIONS

2022	Divers Alert Network CPR/AED/First Aid	2012	AAUS Dive Leader
2022	Divers Alert Network O2 Administration	2010	SSI Dive Guide
2022	Canadian Pleasure Craft Operator License	2010	NAUI Rescue Diver
2014	NAUI Assistant Instructor	2009	SSI Diver Stress and Rescue
2014	SSI Freediving Instructor Level 1	2008	IANTD Cave Diver and Nitrox Diver
2013	SSI Level 1-3 Freediver	2007	PADI Advanced Open Water Diver
2012	SSI Dive Master	2003	PADI Open Water Diver

REFERENCES

Michael L. Berumen, Professor of Marine Science

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