Emily A. Seubert

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**EDUCATION**

**University of South Alabama – Mobile, AL 5/2015 to present**

Master’s of Science in Marine Sciences

Thesis: Species and Functional Diversity of Apex and Mesopredators in the Northern Gulf of Mexico

Thesis advisor: Dr. Marcus J. Drymon, PhD

**University of California, Davis – Davis, CA 9/2009-12/2013**

Bachelor of Science in Biological Sciences with Marine Biology Emphasis

GPA 3.12/4.00

**University of Otago - Dunedin, New Zealand 6/2013-12/2013**

Semester abroad with courses and fieldwork emphasizing marine ecology at the undergraduate and graduate level.

GPA 3.89/4.00

**Bodega Marine Laboratory – Bodega Bay, CA 6/2012-8/2012**

Intensive summer session with coursework, fieldwork, and an independent research project specializing in marine invertebrates and marine ecosystems.

GPA 3.58/4.00

**RESEARCH EXPERIENCE**

**Extension Research Assistant January 2018 to Present**

**Coastal Research and Extension Center Biloxi, MS**

Chief scientist for bottom longline surveys. Assisting in additional laboratory projects and studies investigating various elasmobranch and teleost species in the Gulf of Mexico.

**Graduate Research Assistant May 2015 to December 2017**

**Dauphin Island Sea Lab Dauphin Island, AL**

Chief scientist for bottom longline surveys. Assisting in additional laboratory projects including vertical longline surveys, trawl surveys, stable isotope preparation, otolith and gonad extraction from several vertebrate species, and data collection and processing.

**Research Technician August 2014 to April 2015**

**Dauphin Island Sea Lab Dauphin Island, AL**

Gathered data for Natural Resource Damage Assessment (NRDA) evaluating effects of Deepwater Horizon oil spill on recruitment and recovery levels of eastern oysters (*Crassostrea virginica*).

* Processed oyster quadrat, dredge and settlement plate samples.
* Enumerated organisms, measured juvenile to adult individuals, and performed gonadal and condition indices.

**Laboratory Intern July 2012 to September 2012**

**UC Davis Dept of Evolution and Ecology Bodega Bay, CA**

Cared for organisms, prepared for experiments, and gathered data for research project assessing local adaptation in Olympia oysters (*Ostrea lurida*) and its implications for effects of climate change on oyster populations. Worked for PhD student Jillian Bible in Dr. Eric Sanford’s laboratory at Bodega Marine Laboratory.

* Performed daily activities of oyster feeding and maintaining oxygen and specific temperatures for 75 oyster buckets.
* Cultivated over 200 gallons of *Isochrysis galbana* weekly.
* Assisted in organization and preparation of the Bodega Ocean Acidification Research (BOAR) experiment set-up.

**Laboratory Intern**  **June to August 2010 and June to September 2011**

**RareCyte Inc. Seattle, WA**

Conducted immunoassay experiments to determine effective fluorescent antibody-marking strategies for breast cancer cells using company-developed high-resolution microscope as a method of early cancer detection.

* Practiced safe laboratory protocols for handling biohazardous materials.
* Gathered, organized, analyzed, and presented data to fellow coworkers and corporate executives.

**RESEARCH PROJECTS**

**Master’s Thesis (Advisor: Dr. Marcus J. Drymon) May 2015 to present**

**Dept of Marine Sciences Dauphin Island, AL**

Investigating the species and functional diversity of apex and mesopredators, primarily elasmobranchs, across the Northern Gulf of Mexico.

* Extracting blood, plasma, and muscle samples for stable isotope analysis.
* Chief scientist for bottom longline surveys; involves handling and sampling elasmobranchs and teleosts, preparing and setting gear, and data collection.

**Student Researcher (Supervisor: Dr. Debbie Elliot-Fisk) April 2013 to June 2013**

**Dept of Wildlife, Fish, and Conservation Biology Davis, CA**

Conducted primary research on water quality of Cache Creek and adjacent Gordon Slough using invertebrate and fish species as indicators.

* Utilized field data collection protocols to compare “good water” and “poor water” indicator species.
* Statistically analyzed and presented results for department hosted poster presentation workshop.

**Student Researcher (Supervisor: Dr. Eric Sanford) July 2012 to September 2012**

**Dept of Evolution & Ecology Bodega Bay, CA**

Designed and conducted independent research project to examine trait-mediated indirect interactions of a predatory crab, *Cancer productus,* on varying populations of a predatory whelk species, *Nucella ostrina*.

Additionally tested for effects of local adaptation and waterborne stress cues emitted by injured conspecifics.

* Statistically analyzed and presented data at Western Society of Naturalists conference and UC Davis Undergraduate Research conference.

**SYMPOSIA AND PUBLIC TALKS**

**Oral presentation at the annual meeting of the American Elasmobranch Society, July 2017**

“Evaluating ecosystem resiliency through catch data and stable isotope analysis of common elasmobranchs across the northern Gulf of Mexico”

**Poster presentation at the University of South Alabama Development Council’s Spring Graduate Research Forum, April 2017**

“Species and functional diversity of apex and mesopredators in the Northern Gulf of Mexico."

**Poster presentation at Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 2017**

“Species and functional diversity of apex and mesopredators in the Northern Gulf of Mexico.”

**Oral presentation at Mississippi Alabama SeaGrant Consortium Bays and Bayous conference, November 2016**

“Species and functional diversity of apex and mesopredators in the Northern Gulf of Mexico.”

**Public boardwalk talk at the Dauphin Island Estuarium, November 2016**

“Predator Diversity in the Gulf of Mexico.”

**Oral presentation at the annual meeting of the American Elasmobranch Society, July 2016**

“Species and functional diversity of apex and mesopredators in the Northern Gulf of Mexico.”

**Public talk at the Birmingham Audubon Society, October 2015**

“Are Tiger Sharks a Seasonal Conduit of Terrestrial Energy into Marine Foodwebs?”

**Poster presentation at UC Davis Department of Wildlife, Fish, and Conservation Biology Poster Presentation Workshop, June 2013**

“Bugging Out: Invertebrate and fish species as indicators of Cache Creek and Gordon Slough water quality.”

**Poster presentation at UC Davis Undergraduate Research Conference, May 2013**

**“**Trait-mediated indirect interactions between a predatory crab and different populations of the striped dogwhelk, *Nucella ostrina*.”

**Poster presentation at Western Society of Naturalists, November 2012**

**“**Trait-mediated indirect interactions between a predatory crab and different populations of the striped dogwhelk, *Nucella ostrina*.”

**VOLUNTEER & OUTREACH EXPERIENCE**

**Outreach**

**Shark Week at the Gulf State Park Pier July 27-28, 2017**

Volunteer educator for shark week presented at the Gulf State Park Pier **Gulf Shores, AL**

* Performed several shark dissections for the public
* Answered all questions and educated public on native shark species and their conservation concerns

**Alabama Public Television Dauphin Island, AL**

Served as a shark expert on Gulf Detectives Episode 2 – Animals in the Northern Gulf of Mexico.

**Outreach September 24, 2016**

**Dauphin Island Estuarium Dauphin Island, AL**

Volunteer shark educator for National Estuaries Day.

**Outreach July 2, 2016**

**Dauphin Island Estuarium Dauphin Island, AL**

Volunteer educator for a shark “mocumentary" during Shark Week.

* Answered all questions and educated public on native shark species and their conservation concerns.

**Volunteer November 5, 2016**

**Girls Exploring Math and Science (GEMS)** **Mobile, AL**

Aided in activities and presentations aimed towards young girls interested in math and science attending the workshop.

**Volunteer April 2014-August 2014**

**Seattle Aquarium Seattle, WA**

Exhibit interpreter of the Seattle Aquarium.

**Volunteer Research Assistant June 2009**

**Earthwatch Institute San Salvador, Bahamas**

Gathered and analyzed data for use in research on coral reef health conducted by the Earthwatch Institute.

* Trained in identification of coral reefs and tropical species, surveyed bleached coral, and collected data by underwater quadrat and transect sampling techniques.

**SKILLS**

**Field skills Laboratory skills**

Bottom Longline Otolith and gonad extraction

Vertical Longline Muscle, vertebrae, gonad sampling

Trawling Elasmobranch and teleost blood extraction

Gillnet Stable isotope preparation

Elasmobranch measuring and tagging Oyster and spat count

Transect and quadrat sampling Settlement plate analysis using microscopy

**Computer skills Other skills**

Microsoft Office Independent research design and execution

Image J Knowledge and identification of elasmobranchs

**AWARDS**

**American Elasmobranch Society Travel Grant, 2017**

**GoMRI Scholar, 2016**

**SOCIETIES AND CERTIFICATIONS**

**American Elasmobranch Society (Winter 2016-present)**

**American Society of Ichthyologists and Herpetologists (Winter 2016-present)**

**Member of Dauphin Island Sea Lab Graduate Student Organization (Spring 2015-present)**

**Motorboat Operators Certification Course (Spring 2015)**

**Master’s student faculty representative for Graduate Student Organization (Spring 2015-Spring 2016)**

**Western Society of Naturalists, 2013**

**Chi Omega Fraternity, 2009-2013**

**UC Davis Hunter/Jumper Equestrian team, 2009-2013**

**REFERENCES**

Dr. Marcus J. Drymon

Assistant Extension Professor

Mississippi State University, Coastal Research and Extension Center

Email: marcus.drymon@msstate.edu

Dr. Deborah Giles

Research Director/Project Manager

Center for Whale Research

Email: giles@whaleresearch.com

Dr. Sean Powers

Professor and Chair of Marine Sciences

University of South Alabama

Email: spowers@disl.org