

# Connor F. White

(703) 470-0838

connor.white@gmail.com

---

## EDUCATION

---

- Harvard University** Cambridge, MA  
 Ph.D. Dept. of Organismic and Evolutionary Biology  
 Advisor: Dr. George Lauder
- California State University Long Beach** Long Beach, CA  
 M.S., GPA: 4.0, *honors* in Biology 2016  
 Thesis: "*Quantifying the habitat selection of juvenile white sharks, Carcharodon carcharias, and predicting seasonal shifts in nursery habitat use*"  
 Advisor: Dr. Christopher Lowe
- The College of William & Mary** Williamsburg, VA  
 B.S., *Cum Laude*, GPA: 3.61, *honors* in Biology 2011  
 Honors Thesis: "*The Foraging and Reproductive Ecology of Intertidal Gastropods*"  
 Advisor: Dr. Jonathan Allen

---

## RESEARCH EXPERIENCE

---

- New England Aquarium- Anderson Cabot Center for Ocean Life** Boston, MA  
 Research Technician 2016 - 2019
- Massachusetts Division of Marine Fisheries** New Bedford, MA  
 Fisheries Technician 2017
- Monterey Bay Aquarium-Department of Conservation and Research** Monterey, CA  
 Research Scientist 2017
- ECORP Consulting Inc.** Rocklin, CA  
 On Call Aquatic Biologist 2014
- Mote Marine Laboratory - Behavioral Ecology and Physiology Program** Sarasota, FL  
 Research Technician 2012 - 2013
- Smithsonian Museum of Natural History- Collette Lab** Washington, DC  
 Intern 2012
- Saltwater Inc.** Anchorage, AK  
 Federal Groundfish Observer 2011
- Virginia Institute of Marine Science - Marine Biodiversity Lab** Gloucester Point, VA  
 Intern 2010
- Student Conservation Association - George Washington Parkway** McLean, VA  
 Water Quality Intern 2009

---

**TEACHING AND MENTORING EXPERIENCE**


---

**Harvard University**


---

Lowell House Resident Tutor	Fall 2017 - Present
R for Biologists - Workshop	Summer 2020
Biology of Fishes (TF – OEB 130)	Spring 2018
Lowell House Non-Resident Tutor	2016 - 2017

**Ocean Sciences Institute (Catalina Semester)**


---

Fisheries (TA - OSI 431)	Fall 2015
Marine Community Ecology (TA - OSI 421)	Fall 2015
Directed Research (TA - OSI 490)	Fall 2015

**California State University Long Beach**


---

Biological Statistics (TA - Bio 260)	Spring - Fall 2014
Marine Biology (TA - Bio 153)	Fall 2013

---

**GRANTS, FELLOWSHIPS, SCHOLARSHIPS & AWARDS**


---

**Grants**


---

2016	<b>AES Student Travel Award (\$500)</b> American Elasmobranch Society
2016	<b>COAST Student Travel Award (\$500)</b> California State University Council on Ocean Affairs, Science & Technology
2015	<b>SCTC Graduate Research Grant (\$1000)</b> Southern California Tuna Club
2015	<b>COAST Graduate Student Research Award (\$3000)</b> California State University Council on Ocean Affairs, Science & Technology
2014	<b>SCTC Graduate Research Grant (\$1000)</b> Southern California Tuna Club
2014	<b>LARRC Marine Biology Research Award (\$2500)</b> Los Angeles Rod and Reel Club
2014	<b>Summer Student Research Award (\$5215)</b> California State University Long Beach
2014	<b>Reish Research Grant in Marine Biology (\$950)</b> California State University Long Beach
2014	<b>SCAS Student Research Grant (\$1575)</b> Southern California Academy of Sciences
2014	<b>Student Equipment Grant (Equipment support)</b> Nortek USA
2010	<b>Charlotte Magnum Student Support (\$500)</b> Society for Integrative Biology
2010	<b>Student Conference Travel Award (\$400)</b> The College of William & Mary & Howard Hughes Medical Institute

**Fellowships & Scholarships**


---

2020	<b>Robert A. Chapman Memorial Fellowship (\$2250)</b> Harvard Museum of Comparative Zoology
------	--

- 2015 **WIES Graduate Summer Fellowship** (field station support)  
Wrigley Institute of Environmental Science, University of Southern California
- 2014 **MTS Graduate Scholarship** (\$2000)  
Marine Technology Society
- 2014 **WIES Graduate Summer Fellowship** (field station support)  
Wrigley Institute of Environmental Science, University of Southern California
- 2010 **Coastal Studies Fellowship** (housing support)  
Bowdoin College
- 2010 **Summer Research Fellowship** (\$3800)  
The College of William & Mary & Howard Hughes Medical Institute
- 2009 **Service Scholarship** (\$1250)  
AmeriCorps

### Awards

---

- 2018 **Certificate of Distinction in Teaching**  
Office of Undergraduate Education - Harvard University
- 2016 **Departmental Graduate Student Honors**  
College of Natural Sciences-California State University Long Beach
- 2016 **Outstanding Graduate Research Award** (\$200)  
Biological Sciences-California State University Long Beach
- 2015 **NSF Graduate Research Fellowship Program Honorable Mention**  
National Science Foundation
- 2015 **Student Research Competition 2<sup>nd</sup> Place**  
California State University Long Beach

---

## PUBLICATIONS

---

### Peer Reviewed Journal

---

- 14) Andrew P. Nosal AP, Cartamil DC, Ammann AJ, Bellquist LF, Ben-Aderet NJ, Blincow KM, Burns ES, Chapman ED, Freedman RM, Klimley PA, Logan RK, Lowe CG, Semmens BX, **White CF**, Hastings PA. *Submitted*. Triennial Migration and Philopatry in the Critically Endangered Soupfin Shark (*Galeorhinus galeus*).
- 13) Whitney NM, **White CF**, Smith BJ, Cherkiss MS, Mazzotti FJ, Hart KM. *Accepted*. Activity patterns of invasive Burmese pythons (*Python bivittatus*) in the wild. *Animal Biotelemetry*
- 12) Popp M, **White CF**, Bernal D, Wainwright DK, Lauder GV. 2020. The denticle surface of thresher shark tails: three-dimensional structure and comparison to other pelagic species. *Journal of Morphology* 281(8): 938-955
- 11) Barilotti A, **White CF**, Lowe CG, 2020. Fishing pier association of white croaker and California halibut within the Los Angeles and Long Beach harbors. *Southern California Academy of Sciences Bulletin* 119(1):18-34

- 10) Yung-Chun Z, Moxley JH, Kanive P, Gleiss A, Maughan T, Bird L, Jewell O, Chapple T, Gagne T, **White CF**, Jorgensen SJ. 2019. Deep learning accurately predicts white shark locomotor activity from depth data. *Animal Biotelemetry* 7(1): 1-13
- 9) **White C.F.**, Lyons K, Weng K, Winkler C, Jorgensen SJ, O’Sullivan J, Lowe CG. 2019. Quantifying habitat selection and variability in habitat suitability for juvenile white sharks. *PlosOne* 14(5) e0214642
- 8) Logan RK, Winkler C, Lyons K, **White CF**, Jorgensen SJ, O’Sullivan, JB Lowe CG. 2018. Length, girth and weight morphometric relationships for juvenile white sharks (*Carcharodon carcharias*) in Southern California. *Journal of Fish Biology* 93(5): 842-849
- 7) Benson JF, Jorgensen SJ, O’Sullivan JB, Winkler C, **White CF**, Garcia E, Sosa-Nishizaki O, Lowe CG. 2018. Juvenile survival, competing risks, and spatial variation in mortality risk of a marine apex predator. *Journal of Applied Ecology* 55(6) 2888-2897
- 6) Whitney NM, **White CF**, Anderson PA, Skomal GB, Hueter RH. 2017. Relationships between behavioral and physiological responses and post-release mortality of blacktip sharks (*Carcharhinus limbatus*) caught by circle and J- hooks in the Florida recreational shark fishery. *US Fisheries Bulletin* 115(4): 523-543
- 5) Lin Y, Hsiung J, Piersall R, **White CF**, Lowe CG, Clark CM. 2017. A Multi-AUV System for Autonomous Tracking of Marine Life. *Journal of Field Robotics*. 34(4): 757-773
- 4) **White CF**, Lin Y, Clark CM, Lowe CG. 2016. Man V Robot, assessing the viability of autonomous underwater vehicles to actively track a tagged animal. *Journal of Experimental Marine Biology and Ecology* 485:112-118.
- 3) Hart KM, **White CF**, Sartain AR, Whitney NM. 2016. Trading shallow safety for deep sleep: juveniles green sea turtles risk increased predation for better rest as they grow. *Endangered Species Research* 31:61-73.
- 2) Whitney NM, **White CF**, Gleiss AC, Schweiterman GD, Anderson PA, Skomal GB, Hueter RH. 2016. A novel method for determining post-release mortality, behavior, and recovery period using acceleration data loggers. *Fisheries Research* 183: 210-221
- 1) Whitmore BM, **White CF**, Gleiss AC, Whitney NM. 2016. A float-release package for recovering data-loggers from wild sharks. *Journal of Experimental Marine Biology and Ecology* 475:49-53.

### **Book Chapters**

---

- 2) Whitney NM, Lear KO, Gleiss AC, **White CF**. 2018. Advances in the application of high-resolution biologgers to elasmobranch fishes. In: *Shark Research: Emerging Technologies and Application for the Field and Laboratory*. Editor: Carrier JC, Heithaus MR, Simpfendorfer CA P. 45-71
- 1) Lowe CG, **White CF**, Clark CM. 2018. Use of autonomous vehicles for tracking and surveying of tagged elasmobranchs. In: *Shark Research: Emerging Technologies and*

*Application for the Field and Laboratory*. Editor: Carrier JC, Heithaus MR, Simpfendorfer CA. P. 93-111

### Conference Papers

---

- 3) Smith K, Hsiung S, **White CF**, Lowe CG, Clark CM. 2016. Stochastic modeling and control for tracking the periodic movements of marine animals via AUVs. *Intelligent Robots and Systems (IROS 2016)*, 3101-3107.
- 2) Lin Y, Kastein H, Peterson T, **White CF**, Lowe CG, Clark CM. 2014. A Multi-AUV state estimator for determining the 3D position of tagged fish. In: *Intelligent Robots and Systems (IROS 2014)*. pp 3469-3475.
- 1) Lin Y, Kastein H, Peterson T, **White CF**, Lowe CG, Clark CM. 2013. Using time of flight distance calculations for tagged shark localization with an AUV. *Proceedings of the Unmanned Untethered Submersible Technology Conference*.

### Code Packages

---

- White CF**, Moxley J, Jorgensen SJ. 2016. gRumble: Orienting and rotation IMU data. R package version 0.0.0.9000 (<https://github.com/MBayOtolith/gRumble>)
- White CF**. 2016. TeleFunc: Assorted functions for the analysis of acoustic telemetry data. R package version 0.0.0.9000 (<https://github.com/ConnorFWhite/TeleFunc>)

### IUCN Red List Assessments

---

- Perez-Jimenez JC, **White CF**, Ruiz C, Carlisle AB, Lowe CG. 2016. *Mustelus lunulatus*, Sicklefins Smoothhound. The IUCN Red List of Threatened Species 2016:e.T161640A5470780.
- Bizzarro JJ, Kyne PM, Freedman RM, **White CF**, Lowe CG. 2015. *Zapteryx exasperata*, Banded Guitarfish. The IUCN Red List of Threatened Species 2015:e.T60177A80673370.
- Carlisle AB, Smith SE, Launer AL, **White CF**. 2015. *Triakis semifasciata*, Leopard Shark. The IUCN Red List of Threatened Species 2015:e.T39363A80672743.
- Villavicencio-Garayzar CJ, **White CF**, Lowe CG. 2015. *Cephaloscyllium ventriosum*, Swell Shark. The IUCN Red List of Threatened Species 2015: e.T60227A80671800.

---

## PRESENTATIONS

---

- White CF**, Whitney NM, Weber DN, Frazier BS. 2020. Survival and swimming behavior of red drum (*Sciaenops ocellatus*) following recreational capture and release. Society of Integrative and Comparative Biology. Austin TX.
- White CF**, Clark CM, Lowe CG. 2019. Shark tracking robots: Development of autonomous Vehicles for tracking animals. American Elasmobranch Society. Snowbird UT.
- White CF**, Moxley JH, Gleiss AC, Chapple TK, Kanive PE, Anderson SD, Carlisle AB, Block BA, Jorgensen SJ. 2017. Fine scale variability in stomach temperatures of white sharks (*Carcharodon carcharias*) links to digestion and homeothermy. In: 6th International Biologging Conference. Konstanz, Germany.

- White CF**, Lyons K, Weng K, Winkler C, Jorgensen SJ, O'Sullivan J, Lowe CG. 2016. Movement of Juvenile White Sharks in Southern California: Predicting Future Nursery Habitat. Annual Meeting of the American Elasmobranch Society. New Orleans, LA.
- White CF**, Lyons K, Weng K, Winkler C, Jorgensen SJ, O'Sullivan J, Lowe CG. 2016. Predicting the Distribution of Juvenile White Sharks Based on Dynamic Environmental Data. 2<sup>nd</sup> North East Pacific Shark Symposium. Catalina Island, CA.
- White CF**, Lin Y, Hsiung J, Clark CM, Lowe CG. 2015. Evaluating Autonomous Underwater Vehicles As Tools for Surveying and Tracking Tagged Fish. 145<sup>th</sup> Annual Meeting of the American Fisheries Society. Portland, OR.
- White CF**, Lin Y, Hsiung J, Clark CM, Lowe CG. 2015. Habitat Selection of the Leopard Shark, *Triakis semifasciata*, Using Fine Spatio-Temporal Movement and Temperature Data. American Elasmobranch Society. Reno, NV.
- White CF**, Hart KM, Cherkiss MS, Rockford MR, Mazzotti FJ, Whitney NM. 2014. Activity Patterns and Thermoregulatory Behavior of the Invasive Burmese Python, *Python molurus bivittatus*, in the Florida Everglades, USA. 5<sup>th</sup> International Biologging Symposium. Strasbourg, France.
- White CF**, Lin Y, Piersall R, Clark CM, Lowe CG. 2014. Using Tracking Robots and Accelerometers to Determine Fine Scale Behaviors and Habitat Selection of the Leopard Shark, *Triakis semifasciata*. First North East Pacific Shark Symposium. Seattle, WA.
- White CF**, Anderson PA, Gleiss AC, Skomal GB, Hueter RH, Whitney NM. 2013. Assessing Post-Release Recovery Periods in Blacktip Sharks. Annual Meeting of Western Society of Naturalists. Oxnard, CA.
- White CF**, Allen JD. 2012. Embryo Protection in *Nucella lapillus*: Encapsulation or Aggregation? Benthic Ecology Meeting. Norfolk, VA.
- White CF**, Allen JD. 2011. The Effect of Egg Capsule Clustering on Embryonic Survival in the Dogwhelk *Nucella lapillus*. Society of Integrative and Comparative Biology. Salt Lake City, UT. pp E266-E266.

#### Select Contributed Presentations

---

- Hart KM, Iverson A, Whitney NM, **White CF**, Gredzens C, Shaver DJ. 2020. Acceleration data loggers reveal fine-scale behavior of adult female Kemp's Ridleys during inter-nesting. South East Regional Sea Turtle Meeting. Corpus Christi TX.
- Nosal AP, Cartamil DP, Lam CH, Bellquist LF, Ben-Aderet NJ, **White CF**, Logan RK, Freedman RM, Lowe CG, Semmens BX, Hastings PA. 2019. Triennial Philopatry in the Eastern North Pacific Soupfin Shark (*Galeorhinus galeus*). American Elasmobranch Society. Snowbird UT
- Popp M, Wainwright DK, **White CF**, Bernal D, Lauder GV. 2019. Thresher shark tails: Denticle morphology in comparison to other pelagic sharks. Society of Integrative and Comparative Biology. Tampa, FL.
- Whitney NM, Lear KO, **White CF**. 2018. Bringing Data to the Surface: The Use of Acceleration Data Loggers to Study Post-Release Mortality. Annual Meeting of the American Fisheries Society. Atlantic City, NJ.



- Nemire-Pepe DA, Hart KM, Iverson AR, Fujisaki I, **White CF**, Whitney NM. 2018. Getting to the bottom: accelerometers elucidate diving behavior of female green sea turtles during inter-nesting periods. 103<sup>rd</sup> Annual meeting of the Ecological Society of America. New Orleans , LA.
- Nosal AP, Cartamil DP, Lam CH, Bellquist LF, Ben-Aderet NJ, **White CF**, Logan RK, Freedman RM, Lowe CG, Semmens BX, Hastings PA. 2017. Movement Ecology of the Soupfin Shark (*Galeorhinus galeus*) in the Eastern North Pacific. Sharks International Joao Pessoda, Brazil 2018
- Burns ES, **White CF**, Meese EN, Lowe CG. An all-inclusive Smart Tag combines active tracking, biologging, and animal motion sensors to observe the fine-scale, short term behavior and habitat use of juvenile white sharks. Sharks International Joao Pessoda, Brazil 2018
- Burns ES, **White CF**, Meese EN, Lowe CG. Smart tags: combining active tracking and biologging to capture the fine-scale, short-term behavior and habitat use of juvenile white sharks. North East Pacific Shark Symposium, Seattle WA, 2018
- Lowe CG, **White CF**, Logan RK, Meese EN, Burns ES, Clevenstine A, Winkler C, Jorgensen S, O'Sullivan J. Juvenile white shark nursery behavior and habitat use in southern california. Sharks International Joao Pessoda, Brazil 2018
- Moxley JH, **White CF**, Gleiss AC, Chapple TK, Kanive PE, Anderson SD, Jorgensen SJ. 2017 Development and assessment of a generalizable correction method and R package *gRumble* for orienting unfixed biologging devices in the stomach of white sharks. 6<sup>th</sup> Internaitonal Biologging Conference. Konstanz, Germany.
- Nosal AP, Cartamil DP, Lam CH, Bellquist LF, Ben-Aderet NJ, **White CF**, Logan RK, Freedman RM, Lowe CG, Semmens BX, Hastings PA. 2017. Movement Ecology of the Soupfin Shark (*Galeorhinus galeus*) in the Eastern North Pacific. 4<sup>th</sup> Annual International Fish Telemetry Conference. Cairns, Australia
- Lowe CG, **White CF**, Barilotti AB, Logan RK, Winkler C, Jorgensen SJ, O'Sullivan J. 2016. Beach babies – Nearshore Movement of Juvenile White Sharks off Southern California. Annual Meeting of the Western Society of Naturalists. Monterey, CA.
- Marshall H, Whitney NM, **White CF**, Bernal D, Gennari E, Johnson R, Fischer C, Skomal GB. 2016. The Stress Response and Recovery Behavior of the White Shark (*Carcharodon carcharias*) After Capture on Handline Gear. Annual Meeting of the American Elasmobranch Society. New Orleans, LA.
- Schweiteman GD, Lear K, Marshall H, Morris J, **White CF**, Hueter RH, Skomal GB, Whitney NM. 2016. Post-Release Mortality of Coastal Sharks in a Commercial Longling Fishery. Annual Meeting of the American Elasmobranch Society. New Orleans, LA.
- Logan RK, **White CF**, Barilotti AB, Lyons K, Winkler C, Jorgensen SJ, O'Sullivan J, Lowe CG. 2016. Quantifying the Movements and Behavior of Juvenile White Sharks in Southern California Using Acoustic Telemetry. 2<sup>nd</sup>North East Pacific Shark Symposium. Catalina Island, CA.
- McGarigal C, Luongo S, Logan RK, Barilotti AB, Crear D, Sawyna J, **White CF**, Lowe CG. 2016. Remote Underwater Video: Who's That Shark? In: Second North East Pacific Shark Symposium. Catalina Island, CA.

- Lowe CG, **White CF**, Logan RK, Barilotti AB, Lyons K, Winkler C, Jorgensen SJ, O'Sullivan J. 2015. Quantifying the Movements and Behavior of Juvenile White Sharks in Southern California using Different Electronic Tags. In: California Cooperative Oceanic Fisheries Investigations Conference. Moss Landing, CA.
- Halprin D, Barilotti AB, **White CF**. 2015. Acoustic Tracking of Sand Bass (*Paralabrax spp.*) During Pile Driving in San Diego Bay, CA. 145<sup>th</sup> Annual Meeting of the American Fisheries Society. Portland, OR.
- Barilotti AB, **White CF**, Lowe CG. 2015. Assessing Pier Association and Long-Term Movements of California Halibut (*Paralichthys californicus*) and White Croaker (*Genyonemus lineatus*). 145th Annual Meeting of the American Fisheries Society. Portland, OR.
- Clark CM, Lin Y, Hsiung J, **White CF**, Lowe CG. 2015. Planning, Control, and State Estimation for Animal Tracking with Autonomous Robots. In: Annual Meeting of the American Elasmobranch Society. Reno, NV.
- Lowe CG, **White CF**, Hight B, Bernal D. 2015. Behavioral Thermoregulation in Elasmobranch Fishes: What do we know and where do we go from here? Annual Meeting of the American Elasmobranch Society. Reno, NV.
- Marshall H, **White CF**, Lear K, Hueter RH, Skomal GB, Whitney NM. 2015. Stress Physiology and Post-Release Mortality Rates of Eight Species of Coastal Shark After Longline Capture. In: Tuna Conference. Lake Arrowhead, CA.
- Lowe CG, Lyons K, Winkler C, **White CF**, Jorgensen SJ, O'Sullivan J. 2014. Movement Patterns, Habitat Use, and Fishery Interactions of Juvenile White Sharks in Southern California. In: First North East Pacific Shark Symposium. Seattle, WA.
- Whitney NM, **White CF**, Anderson PA, Gleiss AC, Skomal GB, Lear K. 2014. Hook, Line and Sinker? Accelerometers to Assess Post-Release Mortality and Recovery Periods in Coastal Sharks. Fifth International Biologging Conference Strasbourg, France.
- Hart KM, Whitney NM, Sartain AR, **White CF**. 2013. Assessing Fine-Scale Activity and Behaviors of Juvenile Green Turtles in Dry Tortugas National Park, Florida, USA. In: 16th Annual Florida Marine Turtle Permit Holder Meeting. Orlando, FL.
- Whitney NM, **White CF**, Anderson PA, Gleiss AC, Skomal GB, Hueter RH. 2013. Hook, Line and Sinker? Using Accelerometers to Assess Post-Release Behaviors in Sharks. In: Annual meeting of the American Elasmobranch Society. Albuquerque, NM
- Whitney NM, Randall M, Sulak KJ, **White CF**. 2012. Why do Sturgeon Jump? New Technology to Address an Ancient Question. 142<sup>nd</sup> Annual Meeting of the American Fisheries Society. Minneapolis-St. Paul, MN.

---

### Computer Literacy

R, ArcGIS, IGR Pro, SPSS, MiniTab, Primer

---

### Certifications and Skills

AAUS Scientific Diver (100 ft, 129 logged dives)  
 PADI Rescue Diver  
 CPR/First Aid/Oxygen  
 Small vessel handling



Trailer towing