

## Andrew Harlan Altieri

Dept. of Environmental Engineering Sciences  
University of Florida  
Gainesville, FL 32611

E-mail: [andrew.altieri@essie.ufl.edu](mailto:andrew.altieri@essie.ufl.edu)  
Tel: 352-294-7748  
Web: [www.altierilab.org](http://www.altierilab.org)

### PROFESSIONAL APPOINTMENTS

2018-Present	Assistant Professor, University of Florida, Department of Environmental Engineering Sciences
2018-Present	Research Associate, Smithsonian Tropical Research Institute
2014-Present	Adjunct Professor, McGill University, Department of Biology
2012-2017	Staff Scientist, Smithsonian Tropical Research Institute
2007-2011	Postdoctoral Research Associate and Instructor Brown University, Department of Ecology and Evolutionary Biology
2006-2007	Three Seas Postdoctoral Fellow Northeastern University, Marine Science Center

### EDUCATION

2006	Brown University Ph.D. in Ecology and Evolutionary Biology
1999	University of California Santa Cruz B.A. in Marine Biology (Honors in the Major)

### PUBLICATIONS

(Underline indicates student author)

59. Crotty, S.M., C. Ortals, T.M. Pettengill, L. Shi, M. Olabarrieta, M.A. Joyce, A.H. Altieri, E. Morrison, T.S. Bianchi, C. Craft, M.D. Bertness, C. Angelini (2020) Sea-level rise and the emergence of a keystone grazer alters the geomorphic evolution and ecology of southeast US salt marshes. **Proceedings of the National Academy of Sciences USA** Online early.
58. Nguyen, B.N., E.W. Shen, J. Seemann, A.M.S Correa, J.L. O'Donnell, A.H. Altieri, N. Knowlton, K.A. Crandall, S.P. Egan, W.O. McMillan, M. Leray (2020) Environmental DNA survey captures patterns of fish and invertebrate diversity across a tropical seascape. **Scientific Reports** 10: 1-14.
57. Staaterman, E., A.J. Gallagher, P.E. Holder, C.H. Reid, A.H. Altieri, M.B. Ogburn, J.L. Rummer, S.J. Cooke (2020) Exposure to boat noise in the field yields minimal stress response in wild reef fish. **Aquatic Biology** 29: 93-103.
56. O'Dea, A., M. Lepore, A.H. Altieri, M. Chan, J.M. Morales-Saldaña, N.-H. Muñoz, J.M. Pandolfi, M.A. Toscano, J. Zhao, and E.M. Dillon (2020) Defining variation in pre-human ecosystems can guide conservation: An example from a Caribbean coral reef. **Scientific Reports** 10: 2922.

55. Walker, J.E., C. Angelini, I. Safak, A.H. Altieri, and T.Z. Osborne (2019) Effects of changing vegetation composition on community structure, ecosystem functioning, and predator-prey interactions at the saltmarsh-mangrove ecotone. **Diversity** 11: 208.
54. Gribben, P.E., C. Angelini, A.H. Altieri, M.J. Bishop, M.S. Thomsen, and F. Bulleri (2019) Facilitation cascades in marine ecosystems: A synthesis and future directions. **Oceanography and Marine Biology - An Annual Review**: 57:127-168.
53. MacKenzie, K.M., D.R. Robertson, J.N. Adams, A.H. Altieri, B.L. Turner (2019) Structure and nutrient transfer in a tropical pelagic upwelling food web: From isoscapes to the whole ecosystem. **Progress in Oceanography**: 178: 102145.
52. Crotty, S.M., A.H. Altieri, J.F. Bruno, H. Fischman, and M.D. Bertness (2019) The foundation for building the conservation capacity of community ecology. **Frontiers in Marine Science** 6: 238.
51. Nelson, H.R. and A.H. Altieri (2019) Oxygen: The universal currency on coral reefs. **Coral Reefs**: 38: 177-198.
50. Cheng, B.S., A.H. Altieri, M.E. Torchin, and G.M. Ruiz (2019) Can marine reserves restore lost ecosystem functioning? A global synthesis. **Ecology** 100: e02617.  
\*Featured as a "Research Highlight" in Nature Sustainability
49. Johnson, M. D., L. M. Rodriguez Bravo, S. E. O'Connor, N. F. Varley, and A. H. Altieri (2019) pH variability exacerbates effects of ocean acidification on a Caribbean crustose coralline alga. **Frontiers in Marine Science** 6: 150.
48. Cheng, B.S., G.M. Ruiz, A.H. Altieri, M.E. Torchin (2019) The biogeography of invasion in tropical and temperate seagrass beds: Testing interactive effects of predation and propagule pressure. **Diversity and Distributions** 25: 285-297.
47. Salas, A.K., A.H. Altieri, P.S. Wilson, T.H. Keitt (2018) Predicting the reef acoustic cuescape from the perspective of larval fishes across a habitat quality gradient. **Marine Ecology Progress Series** 605: 173-193.
46. Dunn, R.P., A.H. Altieri, K. Miller, M.E. Yeager, K.A. Hovel (2018) Contrasting behavioral responses to predatory risk cues reflect different foraging strategies in two Caribbean sea urchins. **Marine Ecology Progress Series** 604: 187-198.
45. Thomsen, M.S., A.H. Altieri, C. Angelini, M.J. Bishop, P.E. Gribben, G. Lear, Q. He, D.R. Schiel, B.R. Silliman, P.M. South, D.M. Watson, T. Wernberg, G. Zotz (2018) Secondary foundation species enhance biodiversity. **Nature Ecology and Evolution** 2: 634-639.
44. Davidson, T.M., A.H. Altieri, G.M. Ruiz, M.E. Torchin (2018) Bioerosion in a changing world: a conceptual framework. **Ecology Letters** 21: 422-438.
43. Seemann, J., A. Yingst, R.D. Stuart-Smith, G.J. Edgar, A.H. Altieri (2018) The importance of sponges and mangroves in supporting fish communities on degraded coral reefs in Caribbean Panama. **PeerJ** 6:e4455.

42. Johnson M.D., L.M. Rodriguez, A.H. Altieri (2018) Shallow-water hypoxia and mass mortality on a Caribbean coral reef. **Bulletin of Marine Science** 94:143-144.
41. Campbell, J.C., A.H. Altieri, L.N. Johnston, C.D. Kuempel, R. Paperno, V.J. Paul, J.E. Duffy (2018) Herbivore community determines the magnitude and mechanism of nutrient effects on subtropical and tropical seagrasses. **Journal of Ecology** 106: 401-412.
40. Gedan, K.B., A.H. Altieri, I. Feller, R. Burrell, D. Breitburg (2017) Community composition in mangrove ponds with pulsed hypoxic and acidified conditions. **Ecosphere** 8: e02053.
39. Altieri, A.H., S.B. Harrison, J. Seemann, R. Collin, R.J. Diaz, N. Knowlton (2017) Tropical dead zones and mass mortalities on coral reefs. **Proceedings of the National Academy of Sciences USA** 114: 3660-3665.  
\*Featured in "Editors' Choice" in Science.
38. Staaterman, E., M.B. Ogburn, A.H. Altieri, S.J. Brandl, R. Whippo, J. Seemann, M. Goodison, J.E. Duffy (2017) Bioacoustic measurements complement visual biodiversity surveys: preliminary evidence from four shallow marine habitats. **Marine Ecology Progress Series** 575: 207-215.
37. O'dea A., E.M. Dillon, A.H. Altieri, M.L. Lepore (2017) Look to the past for an optimistic future. **Conservation Biology** 31:1221-1222.
36. Dunn, R.P., A.H. Altieri, K. Miller, M. Yeager, K.A. Hovel (2017) Coral identity and structural complexity drive habitat associations and demographic processes for an increasingly important Caribbean herbivore. **Marine Ecology Progress Series** 577: 33-47.
35. Altieri, A.H. and A.D. Irving (2017) Species coexistence and the superior ability of an invasive species to exploit a facilitation cascade habitat. **PeerJ** 5: e2858.
34. Kuempel, C.D. and A.H. Altieri (2017) The emergent role of small-bodied herbivores in pre-empting phase shifts on degraded Caribbean reefs. **Scientific Reports** 7: 39670.
33. Nelson, H.R., C.D. Kuempel, and A.H. Altieri (2016) The resilience of reef invertebrate biodiversity to coral mortality. **Ecosphere** 7: e1399.
32. Van der Zee, E.M., C. Angelini, L.L. Govers, M.J.A. Christianen, A.H. Altieri, K.J. van der Reijden, B.R. Silliman, J. van de Koppel, M. van der Geest, J.A. van Gils, H.W. van der Veer, T. Piersma, P.C. de Ruiter, H. Olf, T. van der Heide (2016) How habitat forming organisms structure the food webs of two coastal ecosystems. **Proceedings of the Royal Society B** 283: 20152326.
31. He, Q., A.H. Altieri, B. Cui (2015) Herbivory drives zonation of stress-tolerant marsh plants. **Ecology** 96: 1318-1328.
30. Altieri, A.H. and K.B. Gedan (2015) Climate change and dead zones. **Global Change Biology** 21: 1395-1406.
29. Van de Koppel, J., T. van der Heide, A.H. Altieri, B.K. Eriksson, T.J. Bouma, H. Olf, B.R. Silliman (2015) Long-distance interactions regulate the structure and resilience of coastal ecosystems. **Annual Review of Marine Science** 7: 139-158.

28. Altieri, A.H. and J.D. Witman (2014) Modular mobile foundation species as reservoirs of biodiversity. **Ecosphere** 5: 124.
27. He, Q., M.D. Bertness, J.F. Bruno, B. Li, G. Chen, T.C. Coverdale, A.H. Altieri, J. Bai, T. Sun, S.C. Pennings, J. Liu, P.R. Ehrlich, B. Cui (2014) Economic development and coastal ecosystem change in China. **Scientific Reports** 4: 5995.
26. Coverdale, T.C., E.E. Axelman, C.P. Brisson, E.W. Young, A.H. Altieri, M.D. Bertness (2013) New England salt marsh recovery: Opportunistic colonization of an invasive species and its non-consumptive effect. **PLoS One** 8: e73823.
25. Yarrington, C.S., A.C. Tyler, A.H. Altieri (2013) Do snails facilitate bloom-forming macroalgae in a eutrophic estuary? **Journal of Experimental Marine Biology and Ecology** 446: 253-261.
24. Altieri, A.H., M.D. Bertness, T.C. Coverdale, E.E. Axelman, N.C. Herrmann, P.L. Szathmary (2013) Feedbacks underlie the resilience of salt marshes and rapid reversal of consumer driven die-off. **Ecology** 94: 1647-1657.
23. Coverdale, T.C., M.D. Bertness, A.H. Altieri (2013) Regional ontogeny of New England salt marsh die-off. **Conservation Biology** 27: 1041-1048.
22. Coverdale, T.C., N.C. Herrmann, A.H. Altieri, M.D. Bertness (2013) Latent impacts: the role of historical human activity in coastal habitat loss. **Frontiers in Ecology and the Environment** 11: 69-74.
21. He, Q., M.D. Bertness, A.H. Altieri (2013) Global shifts toward positive species interactions with increasing environmental stress. **Ecology Letters** 16: 695-706.
20. Coverdale, T.C., A.H. Altieri, M.D. Bertness (2012) Belowground herbivory increases vulnerability of New England salt marshes to die-off. **Ecology** 93: 2085-2094.
19. Altieri, A.H., M.D. Bertness, T.C. Coverdale, N.C. Herrmann, C. Angelini (2012) A trophic cascade triggers collapse of a salt marsh ecosystem with intensive recreational fishing. **Ecology** 93: 1402-1410.
18. Gedan, K.B., A.H. Altieri, M.D. Bertness (2011) Uncertain future of New England marshes. **Marine Ecology Progress Series** 434: 229-237.
17. Silliman, B.R., M.D. Bertness, A.H. Altieri, J.N. Griffin, M.C. Bazterrica, F.J. Hidalgo, C.M. Crain, M.V. Reyna (2011) Whole-community facilitation regulates biodiversity on Patagonia rocky shores. **PLoS One** 6: e24503.
16. Angelini, C., A.H. Altieri, B.R. Silliman, and M.D. Bertness (2011) Interactions among foundation species and their consequences for community organization, biodiversity, and conservation. **BioScience** 61: 782-789.
15. Thomsen, M.S., T. Wernberg, A. H. Altieri, F. Tuya, D. Gulbransen, K. McGlathery, M. Holmer, B.R. Silliman (2010) Habitat cascades: the conceptual context and global relevance of indirect positive effects. **Integrative and Comparative Biology** 50: 158-175.

14. Altieri, A.H., B.K. van Wesenbeeck, M.D. Bertness, B.R. Silliman (2010) Facilitation cascade explains positive relationship between native biodiversity and invasion success. **Ecology** 91: 1269-1275. \*Selected for review by the Faculty of 1000 Biology
13. Bertness, M.D., C. Holdredge, A.H. Altieri (2009) Substrate mediates consumer control of salt marsh cordgrass on Cape Cod, New England. **Ecology** 90: 2108-2117.
12. Altieri, A.H, G.C. Trussell, P.J. Ewanchuk, G. Bernatchez, M.E.S. Bracken (2009) Consumers control diversity and functioning in a natural marine ecosystem. **PLoS One** 4: e5291.
11. Holdredge, C., M.D. Bertness, A.H. Altieri (2009) Crab herbivory driven die-off of New England salt marshes. **Conservation Biology** 23: 617-692.
10. Altieri, A.H. (2008) Dead zones enhance key fisheries species by providing predation refuge. **Ecology** 89: 2808-2818.  
\*Selected for Ecological Society of America's monthly podcast (Field Talk, 10/08).
9. Van Wesenbeeck, B.K., C.M. Crain, A.H. Altieri, M.D. Bertness (2007) Distinct habitat types arise along a continuous hydrodynamic stress gradient due to the interplay of competition and facilitation. **Marine Ecology Progress Series** 349: 63-71.
8. Altieri, A.H., B.R. Silliman, M.D. Bertness (2007) Hierarchical organization via a facilitation cascade in intertidal cordgrass bed communities. **American Naturalist** 169: 195-206.
7. Zabin, C.J. and Altieri, A. (2007) A Hawaiian limpet facilitates recruitment of a competitively dominant invasive barnacle. **Marine Ecology Progress Series** 137: 175-185.
6. Altieri, A.H. (2006) Inducible variation in hypoxia tolerance across the intertidal-subtidal distribution of the blue mussel *Mytilus edulis*. **Marine Ecology Progress Series** 325: 295-300.
5. Altieri, A.H. and J.D. Witman (2006) Local extinction of a foundation species in a hypoxic estuary: integrating individuals to ecosystem. **Ecology** 87: 717-730.
4. Van de Koppel, J., A. H. Altieri, B.R. Silliman, J. F. Bruno, M. D. Bertness (2006) Scale-dependent interactions and community structure on cobble beaches. **Ecology Letters** 9: 45-50.
3. Lindsey, E.L., A.H. Altieri, J.D. Witman (2006) Influence of biogenic habitat on the recruitment and distribution of a subtidal xanthid crab. **Marine Ecology Progress Series** 306: 223-231.
2. Silliman, B.R., C.A. Layman, A.H. Altieri (2003) Symbiosis between an alpheid shrimp and a xanthoid crab in salt marshes of mid-Atlantic states, U.S.A. **Journal of Crustacean Biology** 23: 876-879.
1. Altieri, A.H. (2003) Settlement cues in the locally dispersing temperate cup coral *Balanophyllia elegans*. **Biological Bulletin** 204: 241-245.

**BOOK CHAPTERS**

6. Altieri, A.H., H.R. Nelson, K.B. Gedan (2019) The significance of ocean deoxygenation for tropical ecosystems – corals, seagrasses, and mangroves. Pages 401-429 *in* Ocean Deoxygenation: Everyone's problem – Causes, impacts, consequences and solutions. D. Loffoley & J.M. Baxter, editors. IUCN, Gland, Switzerland.
5. Altieri, A.H. (2019) Dead zones: Low oxygen in coastal waters. Pages 22-34 *in* Encyclopedia of Ecology. B. Fath, editor. Elsevier Academic Press, Oxford, UK.
4. Altieri, A.H. and R.J. Diaz (2019) Dead zones: Oxygen depletion in coastal ecosystems. Pages 453-473 *in* World Seas: An Environmental Evaluation. C. Sheppard, editor. Elsevier Academic Press, Oxford, UK.
3. Altieri, A.H. (2015) Ecosystem Engineers. *Oxford Bibliographies*. Oxford University Press, Oxford, UK.
2. Altieri, A.H. and J. Van De Koppel (2013) Foundation species in marine ecosystems. Pages 37-56 *in* Marine Community Ecology and Conservation. M. D. Bertness, J. F. Bruno, B. R. Silliman, and J. J. Stachowicz, editors. Sinauer Associates, Sunderland, MA, USA.
1. McCoy, M.W., A.H. Altieri, C. Holdredge, M.S. Thomsen, and B.R. Silliman (2012) Facilitation. Pages 276-279 *in* Encyclopedia of Theoretical Ecology. A. Hastings and L.J. Gross editors. University of California Press, Oakland, CA, USA.

**GRANTS**

(in US dollars)

- |           |   |
|-----------|---|
| 2018-2021 | National Oceanic and Atmospheric Administration, "Assessing the threat of hypoxia to tropical ecosystems: A multi-stressor framework to support coral restoration efforts", \$698,798 (\$406,640 to University of Florida). <b>A.H. Altieri</b> , M.D., Johnson, V.J. Paul. |
| 2018-2020 | National Science Foundation, Biological Oceanography, "The tropicalization of Western Atlantic seagrass beds", \$1,154,919 (\$699,095 to Smithsonian Institution). J.E. Campbell, V.J. Paul, <b>A.H. Altieri</b> , K.L. Heck, J.G. Douglass.                                |
| 2016-2021 | 1923 Fund Foundation, "Marine conservation fellowship program: A STRI-UF collaboration to bridge the Americas", \$478,469. <b>A.H. Altieri</b> , T.M. Davidson, C. Angelini, T.Z. Osborne. (\$239,820 to STRI).   |
| 2016-2019 | Gordon and Betty Moore Foundation, "Evolution of microbiomes in shallow-water marine organisms split by the Isthmus of Panama", \$1,048,975. W.T. Wcislo, <b>A.H. Altieri</b> , H.A. Lessios, D.R. Robertson  |
| 2016-2019 | Ajana Foundation and Hoch Charitable Trust, "Building capacity for two-ocean monitoring at STRI", \$250,000. <b>A.H. Altieri</b> and R. Collin.   |
| 2016-2017 | Smithsonian Institution, Scholarly Studies Award, "The scaling of diversity in tropical marine ecosystems", \$36,400. <b>A.H. Altieri</b> , M. Leray, and N. Knowlton.  |

- 2014-2015 Smithsonian Institution, Grand Challenges Grant from Consortium for Understanding and Sustaining a Biodiverse Planet, “An experimental network for understanding seagrass (*Thalassia testudinum*) biodiversity and ecology— Advancing the Tennenbaum Marine Observatories Network”, \$100,000. V.J. Paul, **A.H. Altieri**, J.E. Campbell, and J. E. Duffy.
- 2010-2013 National Science Foundation, Biological Oceanography, “Is overfishing triggering the die-off of Northeastern US salt marshes?”, \$491,000. M.D. Bertness and **A.H. Altieri**.
- 2005 American Museum of Natural History, Lerner-Gray Fund for Marine Research, “Quantifying the full impact of oxygen depletion on the dynamics and community composition of a temperate estuary”, \$1,800. **A.H. Altieri**.
- 2005 RI Sea Grant, “Supplement to Quantifying the impact of hypoxia on benthic communities of Narragansett Bay”, \$5,500. **A.H. Altieri** and J.D. Witman.
- 2005 Quebec-Labrador Foundation/Atlantic Center for the Environment, Sounds Conservancy, Assessing the full impact of oxygen depletion on the Narragansett Bay estuarine community”, \$2,200. **A.H. Altieri**.
- 2003 Watson Institute for International Studies, “Assessing the ecosystem service value of upwelling in the Galapagos”, \$5,000. **A.H. Altieri**
- 2003-2005 Rhode Island Sea Grant, “Quantifying the impact of hypoxia on the benthic community of Narragansett Bay”, \$66,500. **A.H. Altieri** and J.D. Witman.
- 2002 U.S Environmental Protection Agency, New England Interstate Water Pollution Control Commission, “The effects of water quality degradation on the foundation species blue mussel and the associated benthic community of Narragansett Bay”, \$18,200. **A.H. Altieri** and Jon D. Witman.
- 2001-2004 National Oceanic and Atmospheric Administration, “Structuring of the estuarine community by the mussel *Mytilus edulis*”, \$51,500. **A.H. Altieri** and Jon D. Witman.

### TEACHING EXPERIENCE

- 2020-present Co-instructor, Tropical Wetland Conservation, University of Florida
- 2019-present Instructor, *Ecological Engineering*, University of Florida
- 2018-present Instructor, *Ecosystem Engineers*, University of Florida
- 2011 Instructor, *Tropical Biology* Grad Seminar, Brown University (in Panama)
- 2008-2010 Instructor, *Marine Ecology*, Brown University.
- 2010 Co-instructor, *Coastal Ecology and Conservation*, Brown University
- 2007-2008 Instructor, *Invertebrate Zoology*, Brown University.

- 2007 Instructor, *Marine Protected Areas Workshop*, Northeastern University (in Moorea, French Polynesia).
- 2006 Instructor, *Marine Invertebrate Zoology*, Northeastern University.
- 2005-2006 Co-instructor, *Tropical Marine Biology*, Univ of Virginia (in the Bahamas).
- 2005 Co-instructor, *Tropical Biology*, Brown University (in Belize).
- 2004 Teaching Certificate in Higher Education, Sheridan Center, Brown University.
- 2000-2005 Teaching Assistant, *Conservation Biology, Principles of Ecology, Invertebrate Zoology, and Animal Behavior*, Brown University.
- 1996 Intern, Public Education & Outreach Program, Long Marine Lab, UCSC.

### STUDENT ADVISING AND MENTORSHIP

#### *Postdocs*

Maggie Johnson (2016-2019), co-advised with Val Paul  
 Matt Leray (2016-2018), co-advised with Nancy Knowlton and Owen McMillan  
 Laura Núñez Pons (2016-2017)  
 Janina Seemann (2015-2017)  
 Erica Staaterman (2015-2017), co-advised with Denise Breitburg and Matt Ogburn  
 Brian Cheng (2014-2017), co-advised with Greg Ruiz and Mark Torchin  
 Lisa Schile (2014-2016), co-advised with Pat Megonigal

#### *Graduate students*

Sara Swaminathan, PhD student (2019-present)  
 Patrick Saldaña, PhD student (2018-present)  
 Heather Stewart, PhD student (2016-present)  
 Nicole Knight, PhD student (2015-present)  
 Caitlin Kuempel, MS student (2013-20104), currently postdoc at NCEAS

#### *Undergraduate students, interns, and grad fellows (Listed with current positions)*

Christine Angelini, Assistant Professor, University of Florida  
 Eric Axelman, High school science and hip-hop teacher  
 Tyler Coverdale, PhD student, Princeton University  
 Clare Fieseler, PhD student, UNC Chapel Hill  
 Viktoria Frühling, Intern, Smithsonian Tropical Research Institute  
 Cindy Gonzalez, PhD student, University de los Andes  
 Seamus Harrison, Intern, Smithsonian Tropical Research Institute  
 Nicholas Herrmann, PhD student Harvard University  
 Emily Lindsey, Postdoc, UC Berkeley  
 Marietta Marroquin, MSc student, James Cook University  
 Hannah Nelson, PhD Student, UC Davis  
 Scott Loranger, PhD student, University of New Hampshire  
 Mihir Parikh, Physician  
 Carlos Rincon, Environmental consultant  
 Tanya Rogers, PhD student, Northeastern University  
 Timothy Savage, Physician



### FELLOWSHIPS AND AWARDS

- 2006 Presidential Award for Excellence in Teaching (Honorable Mention), Brown University.
- 2005 John G. Peterson Fellowship, Brown University. Merit-based award to one graduate student in the Division of Biology and Medicine annually.
- 2004 Faculty Scholar Award, Brown University. Merit-based award to three students in the Graduate School annually.
- 2003 Best Student Paper Award, 84<sup>th</sup> Annual Western Society of Naturalists Meeting.
- 2003 Luce Graduate Environmental Fellowship, Watson Institute for International Studies
- 2003 Best Student Paper Award, 32<sup>nd</sup> Annual Marine Benthic Ecology Meeting.
- 2001 Graduate Research Fellowship, National Estuarine Research Reserve System, National Oceanic and Atmospheric Administration.
- 1999 Dean's Award for Undergraduate Research, Division of Natural Sciences, University of California Santa Cruz (UCSC).
- 1999 Honors in the Major, Department of Biology, UCSC.
- 1999 Senior Thesis Honors, Department of Biology, UCSC.
- 1998 President's Undergraduate Fellowship, University of California.
- 1998 Student Research Award, Long Marine Laboratory, UCSC.

### INVITED PRESENTATIONS

- 2019 University of Houston, Department of Biology and Biochemistry
- 2019 Brown University, Department of Ecology and Evolutionary Biology
- 2018 UC Santa Barbara, Department of Ecology, Evolution, and Marine Biology
- 2018 Smithsonian Marine Station Ft. Pierce
- 2017 NOAA National Ocean Service (NOS) Science Seminar
- 2016 University of Florida, Engineering School for Sustainable Infrastructure & Environment
- 2015 University of Canterbury, Department of Biological Sciences
- 2013 McGill University, Department of Biology
- 2012 PEW Marine Fellows Meeting, Models for coupled human and natural ecosystems
- 2012 Asociacion Panameña para el Avance de la Ciencia, Simposio Especies Invasoras
- 2011 Coastal & Estuarine Research Federation, Recreational fishing & ecosystem collapse
- 2011 University of Rhode Island, Department of Natural Resources Science
- 2011 Northeastern University, Marine Science Center
- 2011 Smithsonian Institution, Smithsonian Tropical Research Institute
- 2011 George Washington University, Department of Biological Sciences
- 2011 University of Maryland, Chesapeake Biological Laboratory
- 2010 American Physiological Society, Global Change and Global Science
- 2010 University of Groningen, Center for Ecological and Evolutionary Studies
- 2010 Netherlands Institute of Ecology, Center for Estuarine and Coastal Ecology

2010 University of Massachusetts – Boston, Department of Biology  
 2010 Texas A&M University – Corpus Christi, Department of Life Sciences  
 2009 Coastal & Estuarine Research Federation, Hypoxia Impacts on Coastal Ecosystems  
 2009 Boston University, Department of Biology  
 2008 Harvard University, Harvard Forest  
 2008 Florida International University, Department of Biological Sciences  
 2007 San Diego State University, Department of Biology  
 2007 NOAA – Ecological Impact of Hypoxia on Living Resources Symposium & Workshop  
 2007 University of California Davis, Center for Population Biology  
 2007 University of Rhode Island, Graduate School of Oceanography  
 2006 Save the Bay (Narragansett Bay region’s largest restoration and outreach NGO)  
 2006 U.S. Environmental Protection Agency, New England Regional Office  
 2006 University of Rhode Island, Department of Biological Sciences  
 2006 University of New Hampshire, Department of Natural Resources  
 2005 University of California Davis, Bodega Marine Laboratory  
 2005 Duke University Marine Laboratory  
 2005 3<sup>rd</sup> Annual Ronald C. Baird Sea Grant Science Symposium on RI Coastal Ecosystems  
 2002 Northeastern University, Marine Science Center

### CONTRIBUTED PRESENTATIONS

(Recent five years; Underline indicates student author)

Johnson, M.D., S.D. Swaminathan, E.N. Nixon, V.J. Paul, A.H. Altieri (2020) Resistance of a reef-building coral to hypoxia. Ocean Sciences Meeting, Association for the Sciences of Limnology and Oceanography.

Adelson, A.E., K.A. Davis, S.N. Giddings, R. Collin, V. Reed, A.H. Altieri, G.R. Pawlak (2020) Physical mechanisms of hypoxic events and temperature inversions in Bahia Almirante, a shallow tropical embayment in Bocas del Toro, Panama. Ocean Sciences Meeting, Association for the Sciences of Limnology and Oceanography.

Altieri, A.H., M.D. Johnson, M. Leray, N. Lucey, L.M. Rodriguez, J.J. Scott, W.L. Wied (2020) Deoxygenation over coral reefs triggers coral bleaching and microbial community shift. 4<sup>th</sup> Biennial North Florida Marine Science Symposium.

Saldaña, P.H., N.A. Goetz, and A.H. Altieri (2020) Movement and erosional effects of a highly abundant reef consumer are mediated by a newly dominant space-holder. 4<sup>th</sup> Biennial North Florida Marine Science Symposium.

Swaminathan, S.D., M.D. Johnson, V.J. Paul, A.H. Altieri<sup>1</sup> (2020) Light exposure mediates susceptibility of juvenile *P. astreoides* to oxygen depletion. 4<sup>th</sup> Biennial North Florida Marine Science Symposium.

Wied, W.L., A.H. Altieri, J. Campbell, O.K. Rhoades (2019) Fish functional groups vary in their nutrient provisioning in a tropical seagrass bed. 25<sup>th</sup> Biennial Coastal and Estuarine Research Federation Conference.

Campbell, J., O.K. Rhoades, A.H. Altieri, J.G. Douglass, V.J. Paul, K.L. Heck (2019) The tropicalization of Western Atlantic seagrass beds: Brief insights from a large-scale coordinated network. 25<sup>th</sup> Biennial Coastal and Estuarine Research Federation Conference.

Rhoades, O.K., W.L. Wied, A.H. Altieri, S.C. Barry, S. Jones, C.W. Martin, O. O'Shea, C.J. Patrick, V.J. Paul, L.K. Reynolds, B. van Tussenbroek, J. Campbell (2019) Predation and herbivory across spatial and temporal scales: a fishy tale. 25<sup>th</sup> Biennial Coastal and Estuarine Research Federation Conference.

Cannon, A.L., C. Peña, E. Brown, A. O'Dea, A.H. Altieri, J.E. Smith (2020) Invasion of the reef urchins: Impact of Echinometra on seagrass beds in Bocas del Toro. 25<sup>th</sup> Biennial Coastal and Estuarine Research Federation Conference.

Altieri, A.H., M.D. Johnson, M. Leray, N. Lucey, L.M. Rodriguez, J.J. Scott, W.L. Wied (2020) Deoxygenation over coral reefs triggers coral bleaching and microbial community shift. 25<sup>th</sup> Biennial Coastal and Estuarine Research Federation Conference.

Clever, F., R.F. Preziosi, B. Nguyen, O. McMillan, A. Altieri, M. Leray (2019) Metabarcoding reveals dietary versatility of coral reef fishes in response to habitat degradation. British Ecological Society Meeting.

Nguyen, B.N., A.H. Altieri, N. Knowlton, G. Paulay, R.M. Lasley, F. Michonneau, G.C. Kupiec, J.L. O'Donnell, W.O. McMillan, K.A. Crandall, M. Leray (2019) Metabarcoding a tropical lagoon: Diversity patterns across habitats, taxa, and body sizes. Annual Meeting of the Ecological Society of America.

Altieri, A.H., C. Angelini, M.J. Bishop, P.E. Gribben, M.S. Thomsen, D.M. Watson (2019) Are facilitation cascades all wet? Broadening recognition of the facilitation cascade concept after a decade of research. 48<sup>th</sup> Annual Marine Benthic Ecology Meeting.

Staaterman, E., A.J. Gallagher, P.E. Holder<sup>G</sup>, C.H. Reid<sup>G</sup>, A.H. Altieri, M.B. Ogburn, J.L. Rummer, S.J. Cooke (2019) Apparent sensitization to boat noise in wild reef fish. Aquatic Noise.

Clever<sup>G</sup>, F., R.F. Preziosi, B. Nguyen<sup>G</sup>, O. McMillan, A. Altieri, M. Leray<sup>P</sup> (2019) Metabarcoding reveals Dietary Versatility of Coral Reef Fishes in Response to Habitat Degradation. 8th International Barcode of Life Conference.

Adelson, A., G. Pawlak, K. Davis, R. Collin, A. Gaul, V. Reed, A. Altieri, S. Giddings (2019) Hypoxic events in Bahía Almirante, a semi-enclosed tropical embayment. Ocean Sciences Meeting, Association for the Sciences of Limnology and Oceanography.

MacKenzie, K.M., D.R. Robertson, A.H. Altieri, J. Adams, B.L. Turner (2018) Isotopic characterization of an inshore tropical pelagic ecosystem: The Bay of Panama. 11<sup>th</sup> International Conference on the Applications of Stable Isotope Techniques to Ecological Studies.

Johnson, M.D., L. Rodriguez, A. H. Altieri (2018) Variable environments inhibit crustose coralline growth and acclimation to ocean acidification. Gordon Research Conference - Ocean Global Change Biology.

Cannon, A.L., C. Peña, E. Brown, A. O'Dea, A. H. Altieri, J.E. Smith (2018) The Role of Grazing by Fish and Sea Urchins in Structuring Seagrass Beds in Bocas del Toro, Panamá. 71st annual conference of the Gulf and Caribbean Fisheries Institute.

Nguyen, B.N., A.H. Altieri, N. Knowlton, G. Paulay, W.O. McMillan, K.A. Crandall, M. Leray, (2018) Are coral reefs really the most diverse tropical shallow-water habitats? 99<sup>th</sup> Annual Western Society of Naturalists Meeting.

Salas, A.K., P.S. Wilson, M.S. Ballard, A.H. Altieri, T.H. Keitt (2017) The role of intermittent, short range cues on larval fish settlement. 41<sup>st</sup> Annual Larval Fish Conference.

Altieri, A.H., S.B. Harrison, H.R. Nelson, J. Seemann, R. Collin<sup>2</sup>, R.J. Diaz, N. Knowlton (2017) Tropical dead zones and mass mortalities on coral reefs. 24<sup>th</sup> Biennial Coastal and Estuarine Research Federation Conference.

Nelson, H.R. and A.H. Altieri (2017) Coral reefs: Extreme oxygen environments? 24<sup>th</sup> Biennial Coastal and Estuarine Research Federation Conference.

Altieri, A.H., C. Angelini, M.D. Bertness, J.F. Bruno, C.M. Crain, A.D. Irving, B.R. Silliman, J. van de Koppel, B.K. van Wesenbeeck (2017) Ecological lessons from the rolling stones: Bertness lab adventures on cobblestone beaches. 45<sup>th</sup> Annual Marine Benthic Ecology Meeting.

Chin, D.W., A.H. Altieri, B.J. Peterson (2017) The influence of biogeochemistry and predation on chemosymbiotic clams (Lucinidae) in tropical seagrass beds. 45<sup>th</sup> Annual Marine Benthic Ecology Meeting.

Altieri, A.H., S.B. Harrison, J. Seemann, R. Collin, R.J. Diaz, N. Knowlton (2016) The threat of tropical dead zones to coral reefs. 4<sup>th</sup> International Marine Conservation Congress.

Courtier, C.A., A. O'Dea, and A.H. Altieri (2016) Changes in the intensity of damselfish algal gardening in Bocas del Toro, Panama over 7000 years. 13<sup>th</sup> International Coral Reef Symposium.

Salas, A.K.; P.S. Wilson, A.H. Altieri, M.S. Ballard, T.H. Keitt (2017) Predicting the cuescape from the reef soundscape and its role in larval fish settlement. Acoustical Society of America and the European Acoustics Society joint meeting.

Seeman, J., A. Yingst, R. Stuart Smith, J.E. Campbell, J.E. Duffy, A.H. Altieri (2016) MarineGEO study: Sponges and habitat connectivity support fish communities in degraded reef habitats. 13<sup>th</sup> International Coral Reef Symposium.

Witman, J.D., F. Smith, M. Brandt, S. Banks, A.H. Altieri, E. Moore, R. Lamb (2016) Asymmetric, large scale community responses to climate oscillations in Galapagos subtidal ecosystems. 13<sup>th</sup> International Coral Reef Symposium.

Altieri, A.H., S.B. Harrison, J. Seemann, R. Collin, R.J. Diaz, N. Knowlton (2016) Tropical dead zones and the collapse of coral reefs. 13<sup>th</sup> International Coral Reef Symposium.

Salas, A.K., P.S. Wilson, M.S. Ballard, A.H. Altieri, and T.H. Keitt (2016) Soundscape variation across four coral reefs in Caribbean Panama. 12<sup>th</sup> International Congress on the Biology of Fishes.

Schile, L., J.P. Megonigal, A.H. Altieri (2016) Variation in tidal wetland and mangrove storage across climate gradients. Society of Wetland Scientists 2016 Annual Meeting.

Gedan, K.B., A.H. Altieri, R.B. Burrell, I.C. Feller, and D.L. Breitburg (2016) Macrofaunal communities persist in mangrove ponds with pulsed hypoxic and acidic conditions. 44<sup>th</sup> Annual Marine Benthic Ecology Meeting.

Altieri, A.H. and J.D. Witman (2015) Modular mobile foundation species as reservoirs of biodiversity. 43<sup>rd</sup> Annual Marine Benthic Ecology Meeting.

MacKenzie, K., C. Trueman, B. Turner, A.H. Altieri, R. Robertson (2015) The importance of upwelling to oceanic top predators. 9<sup>th</sup> International Conference on the Applications of Stable Isotope Techniques to Ecological Studies.

Witman, J.D., F. Smith, M. Brandt, S. Banks, A.H. Altieri, E. Moore, R.W. Lamb (2015) Asymmetric, large-scale community responses to climate oscillations in Galapagos subtidal ecosystems. 43<sup>rd</sup> Annual Marine Benthic Ecology Meeting.

Johnston, L., J. Campbell, V. Paul, A.H. Altieri, C. Kuempel, J.E. Duffy, (2015) The responses of tropical seagrass epiphytes to alterations in nutrient supply and grazer abundance. 43<sup>rd</sup> Annual Marine Benthic Ecology Meeting.

Campbell, J., L. Johnston, V. Paul, C. Kuempel, A.H. Altieri, J.E. Duffy (2015) Responses of tropical seagrass meadows (*Thalassia testudinum*) to experimental manipulations of nutrient supply and consumer abundance. 43<sup>rd</sup> Annual Marine Benthic Ecology Meeting.

## PROFESSIONAL ACTIVITIES & SERVICE

### *Professional Affiliations*

American Association for the Advancement of Science, American Association of Underwater Scientists, American Institute of Biological Sciences, Ecological Society of America, Estuarine Research Federation, New England Estuarine Research Society, Sigma Xi, Western Society of Naturalists.

### *Workshops and Working groups*

Facilitations Cascades Across Ecosystems and Scales, University of Canterbury  
 Biological Condition Gradients, Narragansett Bay Estuaries Program  
 Ecological Impacts of Hypoxia on Living Resources, NOAA  
 Ecosystem Models for Coupled Human and Natural Systems, PEW Marine Fellows Meeting  
 Global Change and the Emerging Threat of Dead Zones, American Physiological Society  
 Narragansett Bay Interdisciplinary Working Group, Brown University, EPA, NOAA  
 Science Symposium on Rhode Island Coastal Ecosystems, RI Sea Grant

### *Manuscript reviewer*

Acta Oecologica; American Naturalist; Annals of Botany; Aquatic Ecology; Ecosystems; Conservation Biology; Coral Reefs; Ecology Letters; Ecology; Ecosystems; Ecosphere; Environmental Science & Technology; Estuaries and Coasts; Estuarine, Coastal, and Shelf Science; Global Change Biology; Journal of Animal Ecology; Journal of Ecology; Journal of Experimental Marine Biology and Ecology; Journal of Shellfish Biology; Journal of the Marine Biological Association of the United Kingdom; Limnology and Oceanography; Marine Biology; Marine Ecology Progress Series; Marine Environmental Research; Nature Communications; Oecologia; Oikos; PeerJ; PLoS ONE; Science Advances; Trends in Ecology and Evolution

*Proposal reviewer*

AAUS Student Scholarship; Biodiversa; FONDECYT, Chile; New Hampshire Sea Grant; NSF, Biological Oceanography; NSF, Coastal SEES (Panel member); NSF Ecosystems; NSF, Population and Community Ecology; National Estuarine Research Reserve Graduate Student Fellowship; National Geographic, Young Explorers Grant; Netherlands Organisation for Scientific Research; Rhode Island Sea Grant

*Service within home institution*

Departmental Committee, Website and communication strategy, Univ of Florida  
 Search Committee, Computational Sustainability faculty position, Univ of Florida  
 Academic Board, STRI  
 Diving Safety Officer Search Committee, STRI  
 Internship Coordinator Search Committee, STRI  
 Postdoc Fellowship Selection Committee, Marine Science Network, STRI  
 Postdoc Fellowship Selection Committee, Tennenbaum Marine Observatories/MarineGEO  
 Executive Committee, Tennenbaum Marine Observatories/MarineGEO  
 Site PI for Panama, Tennenbaum Marine Observatories/MarineGEO  
 Burch Fellowship Selection Committee, Smithsonian Institution

**MEDIA COVERAGE**

Magazine article by Jackson Landers, *Smithsonian Magazine*, (Coral reefs now face deep water dead zones, 03/20/17).  
 Newspaper article by Helkin Guevara, *La Prensa*, (Corales sin vida, 07/27/17)  
 Newspaper article by Doyle Rice, *USA Today*, (Coral reefs have another enemy: Dead zones, 03/20/17).  
 Coverage at Climate.gov (<http://www.climate.gov/news-features/featured-images/climate-change-likely-worsen-us-and-global-dead-zones>, November 2014).  
 Newspaper article by Darryl Fears, *Washington Post*, (Larger 'dead zones,' oxygen-depleted water, likely because of climate change, 11/10/14).  
 Weather Channel exclusive video, <http://www.weather.com/video/purple-marsh-crabs-eating-away-marshland-54691>, October 2014  
 Newspaper article by Kelly Slivka, *New York Times* (Pressure on predators lead to marshland die-offs, 6/12/12).  
 Newspaper article by Carolyn Johnson, *Boston Globe* (Crabs may be killing Cape Cod's marshes, 7/6/10).  
 Newspaper article by Daniel Gibson-Reinemer, *Annapolis Capital-Gazette* (Clams find refuge in 'dead zones', 12/06/2/08).  
 Television news feature by Mario Hilario, *NBC-Affiliate WJAR* (11/1/08).  
 Ecological Society of America's monthly Field Talk podcast (Dead Zones as Safe Havens 10/08). <http://www.esa.org/fieldtalk/?m=200810>  
 Newspaper article by Peter Lord, *Providence Journal* (Narragansett Bay's dead zones boon to quahogs, 10/26/08).  
 Radio interview with Costas Halavrezos, *Canadian Broadcasting Corporation* (Maritime Noon, 10/17/08).  
 Radio news broadcast by Steve Klamkin, *WPRO* (10/16/08).  
 Newspaper article by Bob Holmes, *New Scientist* (When Co-operation is the Key to Survival, 2/7/07).  
 Newspaper article by Elizabeth Williamson, *Washington Post* (R.I. Shellfish Offer Clue to

Health of Chesapeake, 5/8/06). Featured by *Seattle Times*.  
Newspaper staff editorial, *Providence Journal* (Bay's Warning Siren, 4/14/06).  
Television news feature by R.J. Heim, *NBC-Affiliate WJAR* (4/12/06).  
Newspaper article by Peter Lord, *Providence Journal* (Study: Bay Lost Billions of Mussels, 4/12/06).  
News article by Ray Henry, *Associated Press* (Algae Blooms Kill One of Narragansett Bay's Best Natural Filters, 4/11/06). Featured by *Boston Globe*, *Knoxville News Sentinel*, *Scripps Howard News Service*, *Westerly Sun*.  
News article, *United Press International* ("Dead Zone" Kills Billions of Mussels, 4/11/06).  
Featured by *Science Daily*, *NewKerala.com*, *DailyIndia.com*.