

DANIELLE L. DIXSON
Curriculum Vitae

School of Marine Science and Policy
University of Delaware
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Lewes, DE 19958

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PROFESSIONAL PREPARATION

Ph.D., 2012, School of Marine and Tropical Biology, James Cook University
Dissertation: Smelling home: the use of olfactory cues for settlement site selection in coral reef fishes
B.S. with honors, 2005, Marine Science, The University of Tampa

APPOINTMENTS

Associate Professor, 2019- current
University of Delaware, College of Earth, Ocean and Environment, Lewes, DE 19958
Assistant Professor, 2015-2019
University of Delaware, College of Earth, Ocean and Environment, Lewes, DE 19958
Assistant Professor, 2013-2015
Georgia Institute of Technology, School of Biology, Atlanta, GA 30332
Postdoctoral researcher, 2011-2013
Georgia Institute of Technology, School of Biology, Atlanta, GA 30332
Graduate Research Fellow, 2007-2012
Laboratories of Drs. Philip Munday, Geoffrey Jones and, Morgan Pratchett, James Cook University, Townsville, QLD, 4810 Australia

HONORS AND AWARDS

2019, International Society of Chemical Ecology Early Career Award
2018, Junior Faculty Award for Scholarly Excellence
2018, International Coral Reef Society Young Scientist Award Nominee
2015, Nifty Fifty USA Science Festival
2015, Outstanding Alumni Award- Early Career James Cook University
2015, Alfred P. Sloan Foundation Fellow
2012, Yulgilbar Foundation Fellowship
2012, James Cook University Medal for outstanding thesis
2009, USA to Australia Fellowship from American Australian Association

STUDENT AWARDS

All students are Graduate Students, * Indicates Undergraduate

E. Sam Fitz Award, University of Delaware College of Earth Ocean and Environment,
Johnston, L.N., 2019
Born Seekers Fellowship, Perricone MD, Good A.M., 2019
1st place Oral Presentation, CEOE Graduate Student Symposium, Leingang,
P.M., 2018
CEOE Volunteer of the Year Award, Johnston, L.N., 2017
1st place Poster, DENIN Graduate Student Symposium, Johnston, L.N. 2017
1st place Pitch:90, Oral presentation Ruhl, E.J. 2017
2nd place Pitch:90, Oral presentation Ashur, M.M. 2017
4th place Pitch:90, Oral presentation *Barnett, A. 2017
2nd place Poster, Undergraduate Research Symposium in the Chemical and
Biological Sciences *Cain, M 2016
4th place Pitch:90, Oral presentation Ruhl, E.J. 2016
2nd place Pitch:90, Oral presentation Ashur, M.M. 2015

PROFESSIONAL MEMBERSHIPS

International Society of Chemical Ecology
Ecological Society of America
International Society for Coral Reef Science
Animal Behavior Society
Society for Conservation Biology
American Fisheries Society

PUBLICATIONS

Dixson lab member (undergraduate student, graduate student, postdoc) indicated with an asterisk (*). Publications in journals with an Impact Factor >10 or in ISI Highly Cited List are highlighted with red text. Publications selected by Faculty of 1000 are highlighted with blue numbers. (ISI ID: B-9253-2018, h-index= 20, 7/25/18; Google scholar h-index=23, citations= 3949, 1/22/19)

1. Ashur, M.M., **Dixson, D.L.** 2019. Coral morphology is linked to increased abundance and fitness of obligate coral-dwelling shrimp, *Coralliocaris graminea*. Public Library of Science One. In Review.
2. Reynolds, D.A., Yoo, M.-J., **Dixson, D.L.**, Ross, C. 2019. Exposure to the Florida red tide dinoflagellate, *Karenia brevis*, and its associated brevetoxins induces ecophysiological and proteomic alterations in *Porites astreoides*. Public Library of Science One. *In review*.
3. Ruhl, E.M., **Dixson, D.L.** 2019. 3D printed objects do not impact the behavior or survival of marine species. Public Library of Science One. 14(8): e0221157.
4. **Feeney, W.E., Brooker, R.M., Johnston, L.N., Gilbert, J.D.J, Besson, M., Lecchini D., Dixson, D.L., Cowman, P.F., Manica A.** 2018. Predation drives recurrent convergence of an interspecies mutualism. *Ecology Letters*. 22: 256-264.
5. Ashur, M.M., **Dixson, D.L.** 2018. Multiple environmental cues impact habitat choice during nocturnal homing of specialized reef shrimp. *Behavioral Ecology*. 30: 348-355.

6. Leingang, P.M. **Dixon, D.L.** 2018. Phenotypic variations in the preferred host coral impact the occupancy of an obligate coral-dwelling fish. *Coral Reefs* 38: 93-101
7. Lecchini, D., Bertucci, F., Gache, C., Khalife, A., Besson, M., Roux, N., Berthe, C., Singh, S., Parmertier, E., Nugues M.M., Brooker, R.M.*, **Dixon, D.L.**, Hedouin, L. 2018. Boat noise prevents soundscape-based habitat selection by coral planulae. *Scientific Reports* 8: 9283.
8. **Dixon, D.L.**, Jones GP. 2018. Influence of prior residents and olfactory mechanism on settlement preferences in the anemonefish, *Premnas biaculeatus*. *Coral Reefs* 37: 519-526.
9. Brooker, R.M.*, Sih, T., Ruiz, E.M.*, **Dixon, D.L.** 2017. Shelter availability mediates decorating in the majoid crab, *Camposcia retusa*. *Behavioral Ecology* 29: 179-185.
10. Brooker, R.M.*, Sih, T., **Dixon, D.L.** 2017. Contact with seaweed alters prey selectivity in a coral-feeding reef fish. *Marine Ecology Progress Series* 580: 239-244.
11. Besson, M., Gache, C., Roux, N., Bertucci, F., Jacob, H., Berthe, C., Sovrano, V.A., **Dixon, D.L.**, Lecchini, D. 2017. Ecological importance of brain lateralization in coral reef fish facing local stressors. *Scientific Reports* 7: 9165.
12. Johnston, N.K.*, **Dixon D.L.** 2017. Anemonefish rely on visual and chemical cues to correctly identify conspecifics. *Coral Reefs* 36: 903-912.
13. Ashur, M.M.*, Johnston, N.K.*, **Dixon, D.L.** 2017. Impacts of ocean acidification on sensory function in marine organisms. *Integrative and Comparative Biology* 57: 63-80.
14. Brooker, R.M.*, **Dixon, D.L.** 2017. Intertidal crustaceans use seaweed-derived chemical cues to mitigate predation risk. *Behavioral Ecology and Sociobiology* 71: 47.
15. Lecchini, D., **Dixon, D.L.**, Lecellier, G., Roux, N., Frédéricich, B., Besson, M., Tanaka, Y., Banaigs, B., Nakamura, Y. 2017. Habitat selection by marine larvae in changing chemical environments. *Marine Pollution Bulletin* 114: 210-217.
16. Brooker, R.M.*, **Dixon, D.L.** 2017. Comparable cross-taxa risk perception by means of chemical cues in marine and freshwater crustaceans. *Marine and Freshwater Research* 68: 788-792.
17. Brooker, R.M.*, Hay, M.E., **Dixon, D.L.** 2016. Chemically cued suppression of coral reef resilience: Where is the tipping point? *Coral Reefs* 35: 1263-1270.
18. Brooker, R.M.*, Feeney, W.E.*, White, J.R., Manassa, R.P., Johansen, J.L., **Dixon, D.L.** 2016. Using insights from animal behavior and behavioral ecology to inform marine conservation initiatives. *Animal Behavior* 120: 211-221.
19. Parris, D.J., **Dixon, D.L.**, Brooker, R.M.*, Morgan, M.A., Stewart, F.J. 2016. Whole gut microbiome composition of damselfish and cardinalfish before and after reef settlement. *Peer J* 4, e2412.
20. Roux, N., Duran, E., Lanyon, R.G., Frédéricich, B., Berthe, C., Besson, M., **Dixon, D.L.**, Lecchini, D. 2016. Brain lateralization involved in visual recognition of conspecifics in coral reef fish at recruitment. *Animal Behavior* 117: 3-8.

21. Scott, A., **Dixson, D.L.** 2016. Reef fishes can recognize bleached habitat during settlement: sea anemone bleaching alters anemonefish host selection. *Proceeding of the Royal Society B* 283: 20152694.
22. Brooker, R.M.*, Brandl, S., **Dixson, D.L.** 2016. Cryptic effects of habitat declines: coral-associated fishes avoid coral-seaweed interactions due to visual and chemical cues. *Scientific Report* 6:18842.
23. Brooker, R.M.*, **Dixson, D.L.** 2016. Assessing the role of olfactory cues in the early life history of coral reef fish: current methods and future directions. *Chemical Signaling in Vertebrates* Vol. 13:17-31.
24. **Dixson, D.L.**, Jennings, A.R., Atema, J., Munday, P.L. 2015. Odor tracking in a shark is reduced under future ocean acidification conditions. *Global Change Biology* 21: 1454-1462.
25. **Dixson, D.L.**, Abrego, D., Hay, M.E. 2014. Chemically-mediated behavior of recruiting corals and fishes: a tipping point that may limit reef recovery. *Science* 345: 892-897.
26. Munday, P.L., Cheal, A.J., **Dixson, D.L.**, Rummer, J.L., Fabricius, K.E. 2014. Behavioral impairment in reef fishes caused by ocean acidification at CO₂ seeps. *Nature Climate Change* 4: 487-492.
27. Manassa, R.P., **Dixson, D.L.**, McCormick, M.I., Ferrari, M.C.O., Chivers, D.P. 2014. Social learning of predators by coral reef fish: does observer number influence acquisition of information? *Behavioral Ecology and Sociobiology* 68: 1237-1244.
28. **Dixson, D.L.**, Jones, G.P., Munday, P.L., Planes, S., Pratchett, M.S., Thorrold, S.R. 2013. Experimental evaluation of imprinting as a mechanism for habitat selection in coral reef fish. *Oecologia* 174: 99-107.
29. Munday, P.L., Pratchett, M.S., **Dixson, D.L.**, Donelson, J.M., Endo, G.G.K., Reynolds, A.D., Knuckey, R. 2013. Elevated CO₂ affects the performance of an ecologically and economically important coral reef fish. *Marine Biology* 160: 2137-2144.
30. Chivers, D.P., **Dixson, D.L.**, White, J.R., McCormick, M.I., Ferarri, M.C.O. 2013. Degradation of chemical alarm cues and assessment of risk throughout the day. *Ecology and Evolution* 3: 3925-3934.
31. Veileux, H.D., van Herwerden, L., Cole, N.J., Don, E.K., De Santis, C., **Dixson, D.L.**, Wenger, A.S., Munday, P.L. 2013. *otx2* expression and implications for olfactory memory in the anemonefish *Amphiprion percula*. *Biology Open* 2: 907-915.
32. Manassa, R.P., **Dixson, D.L.**, McCormick, M.I., Chivers, D.P. 2013. Coral reef fish incorporate multiple sources of social and chemical information to mediate predation risk. *Animal Behavior* 86: 717-722.
33. **Dixson, D.L.**, Hay, M.E., 2012. Corals chemically cue mutualistic fishes to remove competing seaweeds *Science* 338: 804-807.
34. Munday, P.L., McCormick, M.I., Meekan, M., **Dixson, D.L.**, Watson, S.-A., Ferrari, M.C.O., Chivers, D.P. 2012. Selective mortality associated with variation in CO₂ tolerance in marine fish. *Ocean Acidification* 1: 1-5.

35. **Dixon, D.L.**, Pratchett, M.S., Munday, P.L. 2012. Reef fishes distinguish predators based olfactory cues associated with recent prey items rather than innate recognition of individual species. *Animal Behavior* 84: 45-51.
36. Ferrari, M.C.O., Manassa, R.P., **Dixon, D.L.**, Munday, P.L., McCormick, M.I., Meekan, M.G., Sih, A., Chivers, D.P. 2012. Effects of ocean acidification on learning in coral reef fishes. *PLoS One* 7: e11478.
37. Ferrari, M.C.O., McCormick, M.I., Munday, P.L., Meekan, M.G., **Dixon, D.L.**, Lönnstedt, O., Chivers, D.P. 2012. Effects of ocean acidification on visual risk assessment in coral reef fishes. *Functional Ecology* 26: 553-558.
38. Nilsson, G.E., **Dixon, D.L.**, Domenici, P., McCormick, M.I., Sørensen, C., Watson, S.-A., Munday, P.L. 2011. Near-future CO₂ levels alter fish behavior by interference with neurotransmitter function. *Nature Climate Change* 2: 201-204.
39. **Dixon, D.L.** 2011. Predation risk assessment by larval fishes during settlement site selection. *Coral Reefs* 31: 255-261.
40. **Dixon, D.L.**, Jones, G.P., Munday, P.L., Pratchett, M.S., Srinivasan, M., Planes, S., Thorrold, S.R. 2011. Terrestrial chemical cues help coral reef fish larvae locate settlement habitat surrounding islands. *Ecology and Evolution* 1: 586-595.
41. Ferrari, M.C.O., McCormick, M.I., Munday, P.L., Meekan, M.G., **Dixon, D.L.**, Lönnstedt, O., Chivers, D.P. 2011. Putting prey and predator into the CO₂ equation- qualitative and quantitative effects of ocean acidification on predator prey interactions. *Ecology Letters* 14: 1143-1148.
42. Simpson, S., Munday, P.L., Wittenrich, M., Manassa, R., **Dixon, D.L.**, Gagliano, M., Yan, H. 2011. Ocean acidification erodes auditory behavior in a marine fish. *Biology Letters* 7: 917-920.
43. **Dixon, D.L.**, Munday, P.L., Jones, G.P. 2011. Ontogenetic development of olfactory cue use in coral reef fishes. *Coral Reefs* 30: 903-910.
44. Leis, J.M., Siebeck, U., **Dixon, D.L.** 2011. How Nemo finds home: the neuroecology of dispersal and of population connectivity in larvae of marine fishes. *Integrative and Comparative Biology* 51: 826-843.
45. Ferrari, M.C.O., **Dixon, D.L.**, Munday, P.L., McCormick, M.I., Meekan, M.G., Sih, A., Chivers, D.P. 2011. Inter-genetic variation in anti-predator responses of coral reef fishes to ocean acidification: implications of projecting climate change on marine communities. *Global Change Biology* 17: 2980-2986.
46. Munday, P.L., Hernaman, V., **Dixon, D.L.**, Thorrold, S.R. 2011. Effect of ocean acidification on otolith development in larvae of a tropical marine fish. *Biogeosciences* 8: 2329-2356.
47. Munday, P.L., Gagliano, M., Donelson, J.M., **Dixon, D.L.**, Thorrold, S.R. 2011. Ocean acidification does not affect the early life history development of a tropical marine fish. *Marine Ecology Progress Series* 423: 211-221.
48. Munday, P.L., **Dixon, D.L.**, McCormick, M.I., Meekan, M., Ferrari, M.C.O., Chivers, D.P. 2010. Replenishment of fish populations is threatened by ocean acidification. *Proceedings of the National Academy of Science* 107: 12930-12934.

49. Masonjones, M.D., Rose, E., McRae, L.K., **Dixson, D.L.** 2010. Potential anthropogenic effects of the population biology of syngnathid fishes of Tampa Bay: measuring the impacts of marina construction on fish demographics. *Current Zoology* 56: 118-133.
50. **Dixson, D.L., Munday, P.L., Jones, G.P.** 2010. Innate ability of fish larvae to chemically detect predators is threatened by ocean acidification. *Ecology Letters* 13: 68-75.
51. Munday, P.L., Donelson, J.M., **Dixson, D.L.**, Endo, G.G.K. 2009. Effects of ocean acidification on the early life history of a tropical marine fish. *Proceedings of the Royal Society of London B*: 276: 3275-3283.
52. **Munday, P.L., Dixson, D.L., Donelson, J.M., Jones, G.P., Pratchett, M.S., Devitsina, G.V., Døving, K.B.** 2009. Ocean acidification impairs olfactory discrimination and homing ability of marine fish. *Proceedings of the National Academy of Science* 106: 1848-1852.
53. **Dixson, D.L., Jones, G.P., Munday, P.L., Planes, S., Pratchett, M.S., Srinivasan, M., Syms, C., Thorrold, S.R.** 2008. Coral reef fish smell leaves to find island homes. *Proceedings of the Royal Society of London B* 275: 2831-2839

FUNDING HISTORY

Currently awarded

- 2019-2021 University of Delaware Research Foundation (UDRF), PI: Dixon \$38,500
- 2018-2023 National Science Foundation Division of Integrative Organismal Systems (IOS): CAREER: Losing Nemo - the impact of changing seas on mutualistic behavioral interactions, PI: Dixon \$750,000.
- 2016-2019 Gordon and Betty Moore Foundation: Understanding chemical cues in settlement site selection on coral reefs could lead to more effective marine management, PI: Dixon \$1,049,352.
- 2015-2019 National Institute of Health International Cooperative Biodiversity Group (ICBG): Exploration, conservation & development of marine biodiversity in Fiji and the Solomon Islands, PI: Mark Hay (Georgia Tech) \$4,950,387 (Dixon portion \$404,439 in research and salary).

Previously awarded

- 2018 University of Delaware CEOE Dean's fund gift, PI: Dixon \$1,000
- 2017 National Geographic Society Explorer: Mutualism in Anemonefishes: the evolutionary development and likely role mutualistic interactions play in changing environments, PI: Dixon \$22,500.
- 2017-2018 Delaware Sea Grant: Businesses for better bags community initiative to reduce single-use plastic in Lewes DE, PI: Dixon \$10,000
- 2017 Mindlin Foundation: Understanding the predator recognition process through the gut microbial community in coral reefs, PI: Dixon, co-PI: Biddle \$10,000.
- 2016-2017 National Institute of Health International Cooperative Biodiversity Group (ICBG): Discovery and characterization of novel and abundant

bioactive genomic signatures from environmental samples in Fiji, PI: Hay (Georgia Tech) \$252,000 (Dixson portion \$252,000 for research).
2016-2017 National Oceanographic Sea Grant: Understanding the behavioral and physiological impact of ocean acidification on elasmobranchs in Delaware Bay PI: Dixson, co-PI: Johnston and Deemer, \$15,000.
2016-2017 FSBI Understanding the chemical cues used in fish recruitment, PI: Brooker, co-PI: Dixson \$5,108
2016 National Geographic Society Explorer: Chemical crypsis in coral reefs, PI: Brooker, co-PI: Dixson \$16,936.
2016 University of Delaware Transformation Grant: Creating children's books for a capstone experience, PI: Dixson, co-PI: Carothers and Ly \$10,725.
2015-2017 Alfred P. Sloan Foundation: Early Career Award, PI: Dixson \$50,000.
2015 University of Delaware ADVANCE Travel Award, PI: Dixson \$3,300.

Student lead funding

2019 Unidel Fellowship, PI: Benjamin Gallo \$175,000
2019 Explorers Club Mamont Scholarship, PI: Good \$3,000
2018 IRCP French Polynesia Research Grant, PI: Cowan \$5,000.00
2018 University of Delaware Professional Development Award, PI: Ashur \$500
2018 Delaware Sea Grant CBI Graduate Student Internship, PI: Ruhl \$5,417
2018 University of Delaware Professional Development Award, PI: Ruhl \$500
2018 SMSP Student Travel Award, PI: Ruhl \$400
2018 SMSP Student Travel Award, PI: Ashur \$300
2018 SMSP Student Travel Award, PI: Ashur \$700
2018 Stavros-Howe Memorial Fund, PI: Leingang \$1303
2018 University of Delaware Graduate Dissertation Fellowship Award, PI: Ashur \$30,000
2018 Sea Grant Healthy Coastal Ecosystems Fellowship, PI: Deemer \$10,000
2017 FSBI Research Grant, PI: Brooker \$5500.00
2017 Delaware Sea Grant DNREC Graduate Student Fellowship, PI: Johnston \$19,500
2017 Starves Howe Memorial Grant, PI: Johnson \$1,280
2017 Blue Frontier Campaign Grant, PI: Ashur \$150
2017 Blue Frontier Campaign Grant, PI: Johnson \$150
2017 University of Delaware Professional Development Award, PI: Leingang \$500
2017 SMSP Student Travel Award, PI: Leingang \$400
2016 Associations of Marine Laboratories of the Caribbean Student Grant, PI: Ashur \$400
2016 Graduate Climate Conference Grant, PI: Ashur \$300
2016 Graduate Climate Conference Grant, PI: Johnson \$300
2015 NSF Graduate Research Fellowship Program, PI: Ashur \$128,000
2015 Presidential Fellowship, PI: Ashur \$5,500
2015 IRCP French Polynesia Research Grant, PI: Brooker \$5000.00

SERVICE

PROFESSIONAL SERVICE

Hosted visiting scholar: William Feeney, University of Queensland (8-month visit through Fulbright Fellowship), Jill Arnold, National Aquarium (3 week visit May 2018 and May 2017), Carol Meteyer, United States Geological Survey (3 weeks visit May 2018)

Guest editor for the journal *Frontiers in Marine Science* 2018

Organized sessions at 2016 International Coral Reef Symposium, 2017 American Fisheries Society

National Center for Faculty Development and Diversity Faculty Success Program 2017 group leader

Reviewer for (~35 articles/year): *Coral Reefs*, *Marine Ecology Progress Series*, *Proceedings of the National Academy of Science USA*, *Proceedings of the Royal Society of London B Series*, *Marine Biology*, *Journal of Experimental Biology and Ecology*, *Estuarine Coastal and Shelf Sciences*, *Ethology*, *Ecology and Evolution*, *Behavioral Ecology and Sociobiology*, *Animal Behavior*, *Aquatic Biology*, *PLoS One*, *Journal of Chemical Neuroanatomy*, *Environmental Sciences*, *American Naturalist*, *Biological Bulletin*, *Thalassas: International Journal of Marine Sciences*, *Oecologia*

Reviewed for (3 Grant Proposals/year): National Science Foundation, FONDECYT Program (Chile), Maine Sea Grant, Maryland Sea Grant, Florida Sea Grant

Editor of the Mid Atlantic Coastal Acidification Network research priority review Panel member for California Sea Grant's Ocean Acidification and Hypoxia call

UNIVERSITY SERVICE

UD by the Sea presenter (2019)

UD Day in DC presenter (2019)

Interim head of the Diving Control Board (2019)

Member of the Undergraduate Committee (2019)

Member of Academic Program Review Committee (2019)

Delaware to the World presenter (2018)

Speaker at College of Earth, Ocean and Environment and DE Sea Grant event hosting Senator Carper (2018)

Mentor for NSF CAREER workshop sponsored through University of Delaware's research office (2018)

Ocean Currents Lecture by Ashur (2018)

Convocation attendance (2018)

New Student Orientation Volunteer for School of Marine Science and Policy (2018)

Speaker at College of Earth, Ocean and Environment Decision Day (2018)

University of Delaware College of Earth, Ocean and Environment Marine Advisory Service Specialist search committee member (2018-current)

University of Delaware Diving Control Board Member (2017-current)

College of Earth, Ocean and Environment International Task Force Member (2017-current)

School of Marine Science and Policy Display Tank (2017-current)
Co-hosted Artist in Residence at the Lewes Campus (2017)
Hiring Committee for Fisheries Position (2017)
Hiring Committee for Policy Position (2017)
School of Marine Science and Policy Semester Seminar Series Organizer (2017-present)
Presenter, University of Delaware's Faculty Commons Summer Institute (2017)
Speaker, Delaware Interdisciplinary STEAM Citizen Science Project (DISCOVERY) Workshop, University of Delaware (2017)
Presenter at Coast Day (2017)
Ocean Currents Lecture (2017)
University of Delaware SCUBA Club Advisor (2016-current)
Speaker, Sea Grant Ocean Acidification teaching workshop (2016)
Selected Faculty Member for Athlete Faculty Appreciation- Georgia Tech Softball Team (2014)
Selected Presenter to University President from the College of Science and Engineering (2014)
Selected Faculty Member for Athlete Faculty Appreciation- Georgia Tech Swim Team (2014)
School of Biology (Georgia Tech) Seminar Series Organizer (2013-2015)

PUBLIC SERVICE

Presented twice a year as a marine biology professor to 11th-12th grade marine science class at School of Environmental Studies, MN (2015-current)
Creator and Producer of Sea Storybooks (2017-current)
Panelist, Chasing Corals (2017-2018, 4 separate events)
Edited National Geographic Children's Storybook (2017-current, 3 books edited to date)
Letters to a Shark scientist participant (2017-current)
Editor for USPS Coral Reef stamp collection (2017)
Script editor for Blue Planet II (2017)
Presented ocean acidification lecture to 10th-12th grade science class at MOT Charter School, DE (2017-current)
Panelist, Before the Flood (2016)
Letters to a Pre-Scientist participant (2016-current)
Science Café Presenter (2016)
Speaker, US Senate and House of Representatives (2016)
Commentary in National Geographic Articles (2015-2017)
Judge, Intel Science Fair (national competition) (2015-2016)
USA Science and Engineering Festival Nifty Fifty Speaker (2015-2016)
Science Tavern Presenter (2015)
Provided a Book Chapter for Life in our seas underwater photography book (2014)
Lethal Seas NOVA Documentary (2013)
Acid Ocean Documentary (2013)

Postdoctoral Advisees

Dr. Nayani Vidyarathna, 2019-present

Dr. Molly Archer, 2019-2019

Dr. Zara-Louise Cowan, 2017-2018

Dr. Zoe Pratte, 2015-current, co-advised with Dr. Frank Stewart (Georgia Institute of Technology)

Dr. Rohan Brooker, 2014-2017, current postdoc at Deakin University

Dr. Rosa León-Zayas, 2016-2017, co-advised with Dr. Jennifer Biddle- current faculty position at Willamette University, Oregon

Dr. William Feeney, 2016 Fulbright Fellow- current postdoc at University of Queensland

Graduate Advisees

As Lead Advisor (n= 9)

Paul Leingang, PhD, 2019-current

Molly Ashur, PhD, 2014-2019

Taylor Deemer, MS, 2017-2019

Jennifer Joseph, MS, 2017-2019

Alexandra Good, MS, 2018-current

Matthew Vaughn, MS, 2018-current

Paul Leingang, MS, 2016-2018

Emily Ruhl, MS, 2016-2018

Lane Johnston, MS, 2015-2018

As Committee Member (n=3)

Erica Wales, PhD, 2018- current, Advisor: Jeremy Firestone

Cassandra Harris, MS, 2017- current, Advisor: Jennifer Biddle

Michelle Burt, MS, 2016, Advisor: Jeremy Firestone

As External Committee Member (n=6)

Clay Vondriska, MS, 2017-current, Advisor: Paul Sikkel, Arkansas State University

Sophie Pryor, MS, 2016-current, Advisor: Anna Scott, Southern Cross University, Australia

Gail Schwieterman, PhD, 2016-current, Advisor: Richard Brill, Virginia Institute of Marine Science

Nicole Johnston, PhD, 2015-current, Advisor: Mark Hay, Georgia Institute of Technology

Deanna Beatty, PhD, 2014-2018, Advisor: Mark Hay, Georgia Institute of Technology

Jessica Pruett, PhD, 2014-2019, Advisor: Marc Weissburg, Georgia institute of Technology

Undergraduate Advisees (n=22)

2019 Semester in Residence, Audrey Ostroski
2019 Research Experience for Undergraduates (REU), Hannah Cooper
2018, Semester in Residence, Andrea Luck
2018 Semester in Residence, Jillian Hayden
2018 Semester in Residence, Olivia Pleasanton
2018 Semester in Residence, Audrey Ostroski
2018 REU, Cristin Archer
2018 Summer Scholars, Audrey Ostroski
2018 UD Volunteer, Louis Schlecker
2017 Semester in Residence, Ashley Barnett
2017 Summer Scholars, Ashley Barnett
2017 Summer Scholars, Megan Cain
2017 Summer Scholars, Kameron Wong
2017 UD Volunteer, Alexandra Matacchieri
2017 UD Volunteer, Louis Schlecker
2017 UD Volunteer, Bethany Vanderloo
2016 REU, Naomi Gilbert
2016 REU, Enid Munoz Ruiz
2016 Summer Scholars, Melanie Brennan
2016 Summer Scholars, Megan Cain
2016 Summer Scholars, Lucas Pensinger
2016 Semester in Residence, Grace (Maural) Sowat
2016 Semester in Residence, Taylor Deemer
2014 Semester Research, Natalie Moise
2014 Semester Research, Kathryn Martin
2014 Semester Research, Jamie O'Donnell
2014 Semester Research, Zain Sharif
2013 Semester Research, James McCord
2013 Semester Research, Kaylee Isaacs

High School Advisees (n=3)

2019 Vishnu Mohan, Worcester Preparatory School
2018 Riley Roberts, Cape Henlopen High School
2016 Caroline Cook, Sanford High School
2014 Tessa Szalkowski, Grady High School

INVITED DEPARTMENTAL SEMINARS

2018, NOAA, Seattle (Northwest Fisheries Science Center)
2018, Penn State University (Ecology Graduate Student Seminar Series)
2018, University of California Santa Barbara (Department of Ecology, Evolution and Marine Biology)

2018, Columbia University (Department of Ecology, Evolution, and Environmental Biology)
2017, University of North Carolina Chapel Hill (Department of Biology)
2016, University of Hawaii (Department of Biology)
2016, University of Hawaii (Coconut Island Research Station)
2016, University of Delaware (Department of Entomology and Wildlife Ecology)
2015, Stanford University (Hopkins Marine Station)
2015, San Diego State University (Department of Biology)
2015, University of Tampa (School of Marine Science)
2013, University of Porto (Centre of Marine and Environmental Research) Portugal
2011, Georgia Institute of Technology (School of Biology)
2011, Louisiana State University (School of Biology)
2011, Woods Hole Oceanographic Institute (Public Lecture Series)

INVITED PRESENTATIONS

2019, University of Delaware Lewes Campus Docents
2018, University of Delaware Lewes Campus Docents
2017, University of Delaware Lewes Campus Docents
2017, University of Delaware Lewes Campus Docents (Ashur and Johnston)
2016, Dogfish Head Brewery, Annual meeting
2013, Georgia Aquarium, Lunch with a Scientist
2013, Georgia Aquarium, Scientific Lecture Series

PRESENTATIONS AT CONFERENCES: (Abstracts, Poster and Oral Presentations)
first author is presenting author, unless denoted with an asterisk (*).

Pryor SH, Hill R, Dixon DL, Fraser NJ, Kelaher BP, Scott A. 2020. EcoSummit. Gold Coast QLD Australia
Cooper H., Dixon, D.L. 2020. Ocean Sciences Meeting. San Diego, CA. (Oral Presentation).
Brooker, R.M., Casey, J., Cowan, Z.-L., Sih, T., Chivers, D.P., Dixon, D.L., Ferrari, M.C.O., Manica, A., Feeney, W.E. 2020. International Coral Reef Society. Germany (Oral Presentation).
Good, A., Dixon, D.L. 2020. International Coral Reef Society. Germany (Oral Presentation).
Dixon, D.L. 2019. International Society of Chemical Ecology. Atlanta, GA. (Oral Presentation).
Dixon, D.L. 2019. Delaware Applied Coastal Research Symposium. Newark, DE. (Oral Presentation).
Carlson, S., Sneed, J., Gunasekera, S., Agarwal, V., **Dixon, D.L.**, Paul, V.J. 2019. Isolation and identification of waterborne chemical cues for *Porites astreoides* coral larvae. International Society of Chemical Ecology. Atlanta, GA. (Oral Presentation).

Paul, V.J, Carlson, S., Cowan, Z.-L., Sneed, J., dos Santos, L.A.H., Looby, A., Gunasekera, S.P., **Dixson, D.L.** 2018. Coral Restoration Consortium. Key Largo, FL. (Oral Presentation)

Carothers, M., Ly, A., **Dixson, D.L.** 2018 College Book Arts Association, Philadelphia PA. (Oral Presentation)

Feeney, W.E., Brooker, R.M., Johnston, L.N., Gilbert, D.J., Lecchini, D., **Dixson, D.L.**, Cowman, P.F., Manica, A. 2018. International Society of Behavioral Ecology, Minneapolis MN. (Oral Presentation)

Dixson, D.L. 2018. International Society of Behavioral Ecology, Minneapolis MN. (Oral Presentation)

Ashur, M.M., **Dixson, D.L.** 2018. International Society of Behavioral Ecology, Minneapolis MN. (Oral Presentation)

Dixson, D.L. 2018. 13th International Congress on Biology of Fish, Calgary Alberta Canada. (Session Plenary Speaker).

Dixson, D.L. 2018. Annual Meeting of the American Fisheries Society, Atlantic City NJ. (Session Plenary Speaker).

Ashur, M.M., Archer, C., Ostroski, A., **Dixson, D.L.** 2018. Annual Meeting of the American Fisheries Society, Atlantic City NJ. (Oral Presentation)

Deemer, T., **Dixson, D.L.** 2018. Annual Meeting of the American Fisheries Society, Atlantic City NJ. (Oral Presentation)

Johnston, L.N., **Dixson, D.L.** 2018. Annual Meeting of the American Fisheries Society, Atlantic City NJ. (Oral Presentation)

Ruhl, E.J., **Dixson, D.L.** 2018. Annual Meeting of the American Fisheries Society, Atlantic City NJ. (Oral Presentation)

Pryor, S.H., Hill, R., **Dixson, D.L.**, Fraser, N.J., Kelaher, B.P., Scott, A. 2018. Australian Coral Reef Society, Exmouth, WA, Australia (Oral Presentation)

Ashur, M.M., **Dixson, D.L.*** 2018. Benthic Ecology Meeting, Corpus Christi TX. (Oral Presentation)

Reynolds, D., **Dixson, D.L.**, Lunz, K., Ross, C. 2018. Benthic Ecology Meeting, Corpus Christi TX. (Oral Presentation)

Carothers. M., Ly. A., **Dixson, D.L.** 2018 Popular Culture Associations/American Culture Association, Indianapolis IN

Carothers, M., Ly, A., **Dixson, D.L.** 2018 Design Education Summit: Good Design Works, University and College Designers Association, Youngstown OH

Dixson, D.L. 2017. Annual Meeting of the American Fisheries Society, Tampa FL. (Session Plenary Speaker).

Dixson, D.L., Hay, M.E. 2017. Ecological Society of America. Portland OR (Oral Presentation).

Dixson, D.L. 2017. Society of Integrative and Comparative Biology. New Orleans LA (Session Plenary Speaker).

Dixson, D.L. 2017. EMERGED: Contaminants of Environmental Concern in Delaware Waterways. Dover, DE (Invited Oral Presentation).

Ashur, M.M., **Dixson, D.L.** 2017. The 38th Association of Marine Laboratories of the Caribbean Scientific Meeting. Yucatan, Mexico (Invited Poster).

Ashur, M.M., **Dixson, D.L.** 2017. Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society, Dover DE (Oral Presentation).

- Ashur, M.M., ***Dixson, D.L.** 2017. Annual Meeting of the American Fisheries Society, Tampa FL. (Oral Presentation).
- Barnett, A., Cain, M., Maticchieri, A., Vanderloo, B., Wong, K., **Dixson, D.L.** 2017. Mid-Atlantic Chapter of the American Fisheries Society, Dover, DE (Poster Presentation).
- Cowan, Z.-L., Paul, V., **Dixson, D.L.** 2017. European Coral Reef Symposium. Oxford, UK (Invited Oral Presentation).
- Deemer, T., **Dixson, D.L.** 2017. Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society, Dover, DE. (Poster Presentation).
- Johnston, L.N., **Dixson, D.L.** 2017. Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society, Dover, DE (Invited Oral Presentation).
- Leingang, P.M., **Dixson, D.L.** 2017. Geohab: Marine Geological and Biological Habitat Mapping Conference. Nova Scotia, Canada. (Oral Presentation).
- Johnston, L.N., **Dixson, D.L.** 2017. EMERGED: Contaminants of Environmental Concern in Delaware Waterways, Dover, DE (Invited Oral Presentation).
- Cain, M., **Dixson, D.L.** 2017. EMERGED: Contaminants of Environmental Concern in Delaware Waterways, Dover, DE (Poster Presentation).
- Dixson, D.L.**, Hay, M.E. 2016. International Coral Reef Symposium. Honolulu, HI. (Oral Presentation).
- Brooker, R.M., **Dixson, D.L.** 2016. International Coral Reef Symposium Honolulu, HI. (Oral Presentation).
- Scott, A., **Dixson, D.L.** 2016. International Coral Reef Symposium Honolulu, HI. (Oral Presentation).
- Dixson, D.L.** 2016. Northeast Association of Fish and Wildlife Agencies. Annapolis, MD. (Invited Oral Presentation).
- Dixson, D.L.** 2016. Gordon Research Conference. Ventura, CA. (Invited Oral Presentation).
- Brooker, R.M., **Dixson, D.L.** 2015. Fish at Night an international Symposium. Miami, FL (Oral Presentation).
- Dixson, D.L.** 2015. Joint Meeting of Ichthyologists and Herpetologists. Reno, NV (Oral Presentation).
- Dixson, D.L.**, Hay, M.E. 2015. Society of Behavioral Ecology Meeting. New York, NY (Oral Presentation).
- Dixson, D.L.**, Hay, M.E. 2014. International Society of Chemical Ecology Meeting. Champaign, IL (Oral Presentation)
- Dixson, D.L.**, Munday, P.L. 2013. Society of Experimental Biology. Valencia, Spain. (Oral Presentation).
- Dixson, D.L.**, Hay, M.E. 2013. Society of Experimental Biology. Valencia, Spain. (Oral Presentation).
- Dixson, D.L.**, Hay, M.E. 2013. Benthic Ecology Meeting. Savannah, GA. (Oral Presentation).
- Dixson, D.L.**, Jones, G.P., Munday, P.L. 2012. International Larval Biology Symposium. San Francisco, CA (Invited Oral Presentation).
- Dixson, D.L.**, Jones, G.P., Munday, P.L. 2012. International Coral Reef Symposium. Cairns, QLD, Australia (Oral Presentation).

- Dixson, D.L.**, Munday, P.L. 2011. American Society of Fishes. Seattle, WA. (Student Plenary Speaker).
- Dixson, D.L.**, Munday, P.L., Jones, G.P., Pratchett, M.S. 2011. Behavior. Bloomington, IN. (Invited Oral Presentation).
- Dixson, D.L.**, Munday, P.L., Jones, G.P., Pratchett, M.S. 2010. International Larval Biology Symposium. Wellington, New Zealand (Student Plenary Speaker).
- Dixson, D.L.**, Munday P.L., Jones G.P., Pratchett M.S. 2010. Ecological Society of America. Pittsburg, PA. (Oral Presentation).
- Dixson, D.L.**, Munday, P.L., Jones, G.P., Pratchett, M.S. 2009. Indo-Pacific Fish Conference. Perth WA, Australia. (Oral Presentation).
- Dixson, D.L.**, Jones, G.P., Munday, P.L., Pratchett, M.S. 2008. International Coral Reefs Symposium. Fort Lauderdale, FL. (Poster Presentation).
- Dixson, D.L.**, Masonjones, H.D. 2005. American Society of Ichthyology and Herpetology. Tampa, FL (Oral Presentation).

STUDENT PRESENTATIONS

All students are Graduate Students, * Indicates Undergraduate, ♦ Indicates Postdoc

- Leingang, P.M., **Dixson, D.L.** 2018 Dean's Advisory Council, Lewes DE (Oral Presentation).
- Leingang, P.M, **Dixson, D.L.** 2018. DENIN Graduate Student Research Symposium. Newark, DE (Oral Presentation).
- Johnston, L.N., **Dixson, D.L.** 2018. DENIN Graduate Student Research Symposium. Newark, DE (Oral Presentation).
- Joseph, J., **Dixson, D.L.** 2018. DENIN Graduate Student Research Symposium. Newark, DE (Poster).
- Ashur, M.M., **Dixson, D.L.** 2018. DENIN Graduate Student Research Symposium. Newark, DE (Poster).
- Joseph, J., **Dixson, D.L.** 2018. CEOE Graduate Student Association Research Symposium. Lewes, DE (Poster).
- Leingang, P.M., **Dixson, D.L.** 2018. CEOE Graduate Student Association Research Symposium. Lewes, DE (Oral Presentation).
- Ashur, M.M., **Dixson, D.L.** 2018. CEOE Graduate Student Association Research Symposium. Lewes, DE (Poster).
- Cain, M.*, **Dixson, D.L.** 2018. University of Delaware Celebration of Undergraduates Engaged in Scholarship Symposium. Newark, DE (Poster).
- Ashur, M.M., **Dixson D.L.** 2017. CEOE Graduate Student Association Research Symposium. Lewes, DE (Oral).
- Cain, M.*, **Dixson, D.L.** 2017. University of Delaware Celebration of Undergraduates Engaged in Scholarship Symposium. Newark, DE (Poster).
- Johnston, L.N., **Dixson, D.L.** 2017. CEOE Graduate Student Association Research Symposium. Lewes, DE (Poster).
- Joseph, J., **Dixson D.L.** 2017. CEOE Graduate Student Association Research Symposium. Lewes, DE (Poster).
- Ruhl, E., **Dixson, D.L.** 2017. CEOE Graduate Student Association Research Symposium. Lewes, DE (Poster).

- Ashur, M.M., **Dixson D.L.** 2017. DENIN Graduate Student Research Symposium. Newark, DE (Oral Presentation).
- Johnston, L.N., **Dixson, D.L.** 2017. DENIN Graduate Student Research Symposium. Newark, DE (Poster).
- Leingang, P.M., **Dixson, D.L.** 2017. DENIN Graduate Student Research Symposium. Newark, DE (Poster).
- Ruhl, E.J., **Dixson, D.L.** 2017. DENIN Graduate Student Research Symposium. Newark, DE (Poster).
- Brooker, R.M.♦, **Dixson, D.L.** 2016. Lewes-Newark Spring Colloquia. Newark, DE (Oral Presentation).
- Ashur, M.M., **Dixson, D.L.** 2016. 10th Annual Graduate Climate Conference. Pack Forest, WA (Poster).
- Ashur, M.M., **Dixson, D.L.** 2016. Graduate Research Forum. Newark, DE (Oral Presentation).
- Cain, M.*, **Dixson, D.L.** 2016. Undergraduate Research Symposium in the Chemical and Biological Sciences at University of Maryland Baltimore College (Poster).
- Johnston, L.N., **Dixson, D.L.** 2016. 10th Annual Graduate Climate Conference. Pack Forest, WA (Oral Presentation).
- Brooker, R.M.♦, **Dixson, D.L.** 2015. (R)evolutionary Biology: School of Biological Sciences Scientific Retreat. Georgia Institute of Technology (Oral Presentation).

POPULAR PRESS ON MOST COVERED ARTICLES

Work conducted in my lab has been covered in a variety of local, regional and national media outlets, as well as trade publications and academic outlets. A few examples are listed below.

Brooker, R.M., Sih, T., Ruiz, E.M., **Dixson, D.L.** 2018. Shelter availability mediates decorating in the majoid crab, *Camposcia retusa*. *Behavioral Ecology* 29: 179-185.

Article featured in the *Scientific American*, *Science 360 News*, the *Smithsonian*, *UDaily*, and numerous other national and international news articles (Australia, Egypt, The Netherlands)

Scott, A., **Dixson, D.L.** 2016. Reef fishes can recognize bleached habitat during settlement: sea anemone bleaching alters anemonefish host selection. *Proceeding of the Royal Society B* 283: 20152694.

Article featured in *National Geographic*, *Science Daily*, *The Scientist*, *UDaily*, and numerous international news articles (Australia)

Brooker, R.M., Hay, M.E., **Dixson, D.L.** 2016. Chemically cued suppression of coral reef resilience: Where is the tipping point? *Coral Reefs* 35: 1263-1270.

Article featured in Nature World News, IFLScience, The Globe, UDaily, and locally on WDDE-FM.

Dixon, D.L., Jennings, A.R., Atema, J., Munday, P.L. 2015. Odor tracking in a shark is reduced under future ocean acidification conditions. *Global Change Biology* 21: 1454-1462.

Article featured in Nature World News, Discovery News, Science World Report, IFLScience, and numerous other national and international news articles (Australia, China, England, France, Canada)

Dixon, D.L., Abrego, D., Hay, M.E. 2014. Chemically-mediated behavior of recruiting corals and fishes: a tipping point that may limit reef recovery. *Science* 345: 892-897.

Article was the cover feature on *Science* and appeared in BBC News, Nature, Science Daily, NPR (radio interview), Live Science, National Geographic and numerous other national and international news articles (Australia, China, Scotland, India)

Munday, P.L., Cheal, A.J., **Dixon, D.L.**, Rummer, J.L., Fabricius, K.E. 2014. Behavioral impairment in reef fishes caused by ocean acidification at CO₂ seeps. *Nature Climate Change* 4: 487-492.

Featured in NOVA documentary "Lethal Seas"