

## Malin L. Pinsky

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### EDUCATION

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2006-2011 Ph.D. in Biology, Stanford University  
 1999-2003 A.B. *magna cum laude* in Biology and Environmental Studies, Williams College

### PROFESSIONAL EXPERIENCE

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2013-present Associate Professor (2018-present) and Assistant Professor (2013-2018), Department of Ecology, Evolution, and Natural Resources, Rutgers University  
 2015- present Member, Institute of Earth, Ocean, and Atmospheric Sciences, Rutgers University  
 2013- present Affiliate, Department of Marine and Coastal Sciences, Rutgers University  
 2019-2020 Sabbatical Professor, German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, Leipzig, Germany and Helmholtz Institute for Functional Marine Biodiversity, Oldenburg, Germany  
 2013-2015 Member, Institute of Marine and Coastal Sciences, Rutgers University  
 2011-2013 David H. Smith Conservation Research Fellow, Princeton University

### HONORS AND AWARDS

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2022-2023 Earth Leadership Program Fellow  
 2020 Ocean Award in Science, Finalist, Blue Marine Foundation and BOAT International  
 2019 Science News SN10: One of ten early- and mid-career “scientists to watch”  
 2019 Early Career Fellow, Ecological Society of America  
 2018 “Rising Star in Ecology,” Atwood Colloquium in Ecology & Evolution, U. Toronto  
 2016 Early Career Scientist Award, International Council for the Exploration of the Sea  
 2015 Kavli Fellow, National Academy of Sciences  
 2014 Alfred P. Sloan Research Fellow in Ocean Sciences  
 2014 Jasper Loftus-Hills Young Investigators Award, American Society of Naturalists  
 2012 Best Presentation, 2<sup>nd</sup> International Symposium: Effects of Climate Change on the World’s Ocean, ICES/PICES  
 2011 Outstanding Student Research in Ecology Award, 2<sup>nd</sup> Place, Ecological Society of America  
 2009 Best Student Paper in Organismal/Population Biology, Western Society of Naturalists  
 2009-2011 National Science Foundation Graduate Research Fellow (awarded 2006)  
 2006-2009 National Defense Science and Engineering Graduate Research Fellow

### PUBLICATIONS

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Citations 5405; h-index 35; i-10 index 50 (Google Scholar, June 6, 2021).

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Highlights for postdocs, graduate students, staff\*, and undergraduates in my lab or that I mentored.

**Manuscripts (peer reviewed)**

82. Papaioannou, E. A., R. L. Selden, J. Olson, B. McCay, **M. L. Pinsky** and K. St. Martin (*accepted*) Not all those who wander are lost-Responses of fishers & communities to shifts in the distribution and abundance of fish. *Frontiers in Marine Science* <https://doi.org/10.3389/fmars.2021.669094>
81. McManus, L. C.; D. Forrest\*, E. Tekwa, D. Schindler M. Colton, M. Webster, T. Essington, S. Palumbi, P. Mumby; and **M. L. Pinsky** (*accepted*) Evolution and connectivity influence the persistence and recovery of coral reefs under climate change in the Caribbean, Southwest Pacific, and Coral Triangle. *Global Change Biology*. Preprint at <https://www.biorxiv.org/content/10.1101/2021.02.04.429453v1>
80. Castillo Vardaro, J. A., J. A. Bonachela, C. C. M. Baker, **M. L. Pinsky**, D. F. Doak, R. M. Pringle, C. E. Tarnita (*accepted*) Resource availability and heterogeneity shape the self-organization of regular spatial patterning. *Ecology Letters*
79. Clark, R. D., M. L. Aardema, P. Andolfatto, P. H. Barber, A. Hattori, J. A. Hoey, H. R. Montes Jr., and **M. L. Pinsky** (*accepted*) Genomic signatures of spatially divergent selection at clownfish range margins. *Proceedings of the Royal Society B: Biological Sciences*
78. Fredston, A., **M. L. Pinsky**, R. L. Selden, C. Szuwalski, J. Thorson, S. Gaines, B. Halpern (2021) Range edges of North American marine species are tracking temperature over decades. *Global Change Biology* 27(13): 3145-3156 <https://doi.org/10.1111/gcb.15614>
77. McManus, L. C., E. W. Tekwa, D. E. Schindler, T. E. Walsworth, M. A. Colton, M. M. Webster, T. E. Essington, D. L. Forrest\*, S. R. Palumbi, P. J. Mumby, **M. L. Pinsky** (*online early*) Evolution reverses the effect of network structure on metapopulation persistence. *Ecology* e03381 <https://doi.org/10.1002/ecy.3381>
76. **Pinsky, M. L.**, A. M. Eikeset, C. Helmerson, I. R. Bradbury, P. Bentzen, C. Morris, A. Gondek, H. T. Baalsrud, M. S. O. Briauc, O. S. Kjesbu, J. A. Godiksen, J. M. I. Barth, M. Matschiner, N. C. Stenseth, K. S. Jakobsen, S. Jentoft, and B. Star (2021). Genomic stability through time despite decades of exploitation in cod on both sides of the Atlantic. *Proceedings of the National Academy of Sciences* 118(15): e2025453118 <https://doi.org/10.1073/pnas.2025453118>  
 Commentary by J. A. Hutchings & A. Kuparinen, “Throwing down a genomic gauntlet on fisheries-induced evolution”, PNAS 118 (20) e2105319118; <https://doi.org/10.1073/pnas.2105319118>.  
 Recommended on Faculty of 1000.
75. Dedrick, A., K. Catalano, M. Stuart\*, J. W. White, H. Montes, Jr., and **M. L. Pinsky** (2021) Persistence of a reef fish metapopulation via network connectivity: theory and data. *Ecology Letters* 24(6): 1121-1132 <https://doi.org/10.1111/ele.13721>
74. Gignoux-Wolfsohn, S., **M. L. Pinsky**, K. Kerwin, C. Herzog, M. Hall, A. Bennett, N. Fefferman, and B. Maslo (*online early*) Genomic signatures of selection in bats surviving white-nose syndrome. *Molecular Ecology*. <https://doi.org/10.1111/mec.15813>
73. Catalano, K. A., A. G. Dedrick, M. R. Stuart\*, J. B. Puritz, H. R. Montes, Jr., and **M. L. Pinsky** (2021) Quantifying dispersal variability among nearshore marine populations. *Molecular Ecology* 30(10): 2366-2377 <https://doi.org/10.1111/mec.15732>  
 News & Views commentary by P. Saenz-Agudelo and H. B. Harrison, “Stochastic nature of larval dispersal at sea”, *Molecular Ecology* 30(10): 2197-2198 <https://doi.org/10.1111/mec.15927>

72. Bonachela, J. A., M. Burrows, and **M. L. Pinsky** (2021) Rate of community response to climate change depends on species traits and community composition. *Ecology Letters* 24(4):708-718 <https://doi.org/10.1111/ele.13688>
71. Ong, J. L., J. A. Walter, O. P. Jensen, and **M. L. Pinsky** (*online early*) Global hotspots of coherent marine fisheries. *Ecological Applications* e2321 <https://doi.org/10.1002/eap.2321>
70. Moore, C., J. W. Morley, B. Morrison, M. Kolian, E. Horsch, T. Frolicher, **M. L. Pinsky**, and R. Griffis (2021) Estimating the economic impacts of climate change on 16 major U.S. fisheries. *Climate Change Economics* 12(1): 2150002 <https://doi.org/10.1142/S2010007821500020>
69. **Pinsky, M. L.**, E. Fenichel, M. Fogarty, S. Levin, B. McCay, K. St. Martin, R. L. Selden, and T. Young. (2021) Fish and fisheries in hot water: what is happening and how do we adapt? *Population Ecology* 63(1): 17-26 <https://doi.org/10.1002/1438-390X.12050>
68. Tekwa, E. W., L. C. McManus, A. Greiner, M. A. Colton, M. S. Webster, **M. L. Pinsky** (2021) Geometric analysis of regime shifts in coral reef communities. *Ecosphere* 12(1): e03319 <https://doi.org/10.1002/ecs2.3319>
67. Maureaud, A. et al. (+ 75 authors, including **M. L. Pinsky**) (2021). Are we ready to track climate-driven shifts in marine species across international boundaries? - A global survey of scientific bottom trawl data. *Global Change Biology* 27(2): 220-236 <https://doi.org/10.1111/gcb.15404>
66. **Pinsky, M. L.** Diversification spins a heatwave safety net for fisheries (2021) *Proceedings of the National Academy of Sciences* 118(3): e2024412118 <https://doi.org/10.1073/pnas.2024412118>
65. **Pinsky, M. L.**, L. A. Rogers, J. W. Morley, and T. L. Frölicher (2020) Ocean planning for species on the move provides substantial benefits and requires few tradeoffs. *Science Advances* 6(50): eabb8228. <https://doi.org/10.1126/sciadv.abb8428>
64. Morley, J. W., T. Frölicher; and **M. L. Pinsky** (2020) Characterizing uncertainty in climate impact projections: a case study with seven marine species on the North American continental shelf. *ICES Journal of Marine Science* 77(6): 2118-2133. <https://doi.org/10.1093/icesjms/fsaa103>
63. Fredston-Hermann, A., R. L. Selden, **M. Pinsky**, S. D. Gaines, and B. S. Halpern (2020). Cold range edges of marine fishes track climate change better than warm edges. *Global Change Biology* 26(5): 2908-2922. <https://doi.org/10.1111/gcb.15035>
62. Visalli, M. E., B. D. Best, R. B. Cabral, W. W. L. Cheung, N. A. Clarke, C. Garilao, K. Kaschner, K. Kesner-Reyes, V. W. Y. Lam, S. M. Maxwell, J. Mayorga, H. V. Moeller, L. Morgan, G. Ortuño Crespo, **M. L. Pinsky**, T. D. White, and D. J. McCauley (2020). Data-driven approach for highlighting priority areas for protection in marine areas beyond national jurisdiction. *Marine Policy* 122: 103927 <https://doi.org/10.1016/j.marpol.2020.103927>
61. Hoey, J. A., F. J. Fodrie, Q. A. Walker, E. J. Hilton, G. T. Kellison, T. E. Targett, J. C. Taylor, K. W. Able, and **M. L. Pinsky**. (2020) Using multiple natural tags provides evidence for extensive larval dispersal across space and through time in summer flounder. *Molecular Ecology* 29(8): 1421-1435. <https://doi.org/10.1111/mec.15414>
60. **Pinsky, M.L.**, R. L. Selden, and Z. J. Kitchel. (2020) Climate-driven shifts in marine species ranges: scaling from organisms to communities. *Annual Review of Marine Science* 12: 153-179. <https://doi.org/10.1146/annurev-marine-010419-010916>  
Highly Cited Paper (Essential Science Indicators). One of top ten Annual Reviews articles in the physical sciences downloaded in 2020.
59. Selden, R. L., J. Thorson, J. Samhoury, S. Bograd, S. Brodie, G. Carroll, M. Haltuch, E. Hazen, K. Holsman, **M. L. Pinsky**, E. Willis-Norton. (2020) Coupled changes in biomass and distribution drive

- trends in availability of fish stocks to US west coast ports. *ICES Journal of Marine Science* 77(1): 188-199. <https://doi.org/10.1093/icesjms/fsz211>
58. Burrows, M. T., A. E. Bates, M. J. Costello, M. Edwards, G. J. Edgar, C. J. Fox, B. S. Halpern, J. G. Hiddink, **M. L. Pinsky**, R. D. Batt, J. G. Molinos, B. Payne, D. Schoeman, R. D. Stuart-Smith, and E. S. Poloczanska. (2019) Ocean community warming responses explained by thermal affinities and temperature gradients. *Nature Climate Change* 9: 959-963. <https://doi.org/10.1038/s41558-019-0631-5>
57. Free, C. M., J. T. Thorson, **M. L. Pinsky**, K. L. Oken, J. Wiedenmann, and O. P. Jensen (2019) Response to Comment on “Impacts of historical warming on marine fisheries production.” *Science* 365(6454): eaax7170. <https://doi.org/10.1126/science.aax7170>
56. Moberg, E. A., **M. L. Pinsky**, and E. P. Fenichel. (2019) Capital investment for optimal exploitation of renewable resource stocks in the age of global change. *Ecological Economics* 165: 106335. <https://doi.org/10.1016/j.ecolecon.2019.05.015>
55. Walsworth, T. E., D. E. Schindler, M. A. Colton, M. S. Webster, S. R. Palumbi, P. J. Mumby, T. E. Essington, and **M. L. Pinsky**. (2019) Management for network diversity speeds evolutionary adaptation to climate change. *Nature Climate Change* 9: 632–636. <https://doi.org/10.1038/s41558-019-0518-5>
54. Rogers, L. A., R. Griffin, *T. Young*, *E. Fuller*, K. St. Martin, and **M. L. Pinsky**. (2019) Shifting habitats expose fishing communities to risk under climate change. *Nature Climate Change* 9: 512-516. <https://doi.org/10.1038/s41558-019-0503-z>
53. **Pinsky, M. L.**, A. M. Eikeset, D. J. McCauley, J. L. Payne, and J. M. Sunday. (2019) Greater vulnerability to warming of marine versus terrestrial ectotherms. *Nature* 569: 108-111. <https://doi.org/10.1038/s41586-019-1132-4>  
Cover article. News & Views commentary by Richardson, A. J. and D. S. Schoeman <http://doi.org/10.1038/d41586-019-01193-8>. Press coverage by *National Geographic*, *EOS*, *Mashable*, and others. Hot Paper and Highly Cited Paper (Essential Science Indicators). Recommended on Faculty of 1000.
52. **Pinsky, M. L.** (2019) Species coexistence through competition and rapid evolution. *Proceedings of the National Academy of Sciences* 116(7): 2407-2409. <https://doi.org/10.1073/pnas.1822091116>
51. Free, C. M., J. T. Thorson, **M. L. Pinsky**, K. L. Oken, J. Wiedenmann, and O. P. Jensen. (2019) Impacts of historical warming on marine fisheries production. *Science* 363(2430): 979-983. <https://doi.org/10.1126/science.aau1758>  
Press coverage by *New York Times*, *National Geographic*, *CNN*, *The Guardian*, and others. Hot Paper and Highly Cited Paper (Essential Science Indicators). Recommended on Faculty of 1000.
50. Tekwa, E. W., E. P. Fenichel, S. A. Levin, and **M. L. Pinsky** (2019). Path-dependent institutions drive alternative stable states in conservation. *Proceedings of the National Academy of Sciences* 116(2): 689-694. <https://doi.org/10.1073/pnas.1806852116>  
Recommended on Faculty of 1000.
49. *Young, T.*, *E. Fuller*, M. M. Provost, K. Coleman, K. St. Martin, B. J. McCay, and **M. L. Pinsky** (2019). Adaptation strategies of coastal fishing communities as species shift poleward. *ICES Journal of Marine Science* 73(1): 93-103. <https://doi.org/10.1093/icesjms/fsy140>
48. Dubik, B., E. Clark, *T. Young*, S. B. Jones Zigler, M. Provost, **M. L. Pinsky**, and K. St. Martin (2019). Governing fisheries in the face of change: Social responses to long-term geographic shifts in a U.S. fishery. *Marine Policy* 99: 243-251. <https://doi.org/10.1016/j.marpol.2018.10.032>

47. *Flanagan, P., O. Jensen, J. W. Morley, and M. L. Pinsky* (2019). Response of marine communities to local temperature changes. *Ecography* 42(1): 214-224. <https://doi.org/10.1111/ecog.03961>
46. *Hoey, J. A. and M. L. Pinsky* (2018). Genomic signatures of environmental selection despite near-panmixia in summer flounder. *Evolutionary Applications* 11(9): 1732-1747. <https://doi.org/10.1111/eva.12676>
45. *Pinsky, M. L., G. Reygondeau, R. Caddell, J. Palacios-Abrantes, J. Spijkers, and W. W. L. Cheung* (2018). Preparing ocean governance for species on the move. *Science* 360(6394): 1189-1191. <https://doi.org/10.1126/science.aat2360>  
Press coverage by *National Geographic, Washington Post, Huffington Post, Forbes*, and others
44. *Thompson, D., J. Kleypas, F. Castruccio, E. Curchitser, M. L. Pinsky, B. Jönsson, and J. Watson* (2018). Variability in oceanographic barriers to coral larval dispersal: do currents shape biodiversity? *Progress in Oceanography* 165: 110-122. <https://doi.org/10.1016/j.pocean.2018.05.007>
43. *Morley, J. W., R. Selden, R. Latour, T. Frölicher, R. Seagraves, and M. L. Pinsky* (2018) Projecting shifts in thermal habitat for 686 species on the North American continental shelf. *PLOS ONE* 13(5): e0196127. <https://doi.org/10.1371/journal.pone.0196127>  
Press coverage by *National Public Radio, KQED, Boston Globe, Canadian Press*, and others. Highly Cited Paper (Essential Science Indicators).
42. *Pinsky, M. L.* (2018) Throwing back the big ones saves a fishery from hot water. *Proceedings of the National Academy of Sciences* 115(8): 1678-1680. <https://doi.org/10.1073/pnas.1722620115>
41. *Selden, R. L., R. D. Batt, V. S. Saba, and M. L. Pinsky* (2018) Diversity in thermal affinity among key piscivores buffers impacts of ocean warming on predator-prey interactions. *Global Change Biology* 24(1): 117-131. <https://doi.org/10.1111/gcb.13838>
40. *Batt, R. D., J. W. Morley, R. L. Selden, M. W. Tingley, and M. L. Pinsky* (2017) Gradual changes in range size accompany long-term trends in species richness. *Ecology Letters* 20(9): 1148-1157. <https://doi.org/10.1111/ele.12812>
39. *Burgess, M. G., A. Fredston-Hermann, M. L. Pinsky, S. D. Gaines, D. Tilman* (2017) Reply to Le Pape et al: Management is key to preventing marine extinctions. *Proceedings of the National Academy of Sciences* 114(31): E6275–E6276. <https://doi.org/10.1073/pnas.1708147114>
38. *Van Wynsberge, S., S. Andréfouët, N. Gaertner-Mazouni, J. Tiavouane, D. Grulois, J. Lefèvre, M. L. Pinsky, and C. Fauvelot* (2017) Considering reefscape configuration and composition in biophysical models advance seascape genetics. *PLOS ONE* 12(5): e0178239. <https://doi.org/10.1371/journal.pone.0178239>
37. *Holtswarth, J. N., S. B. San Jose, H. R. Montes, Jr., J. W. Morley, and M. L. Pinsky* (2017) The reproductive seasonality and fecundity of yellowtail clownfish (*Amphiprion clarkii*) in the Philippines. *Bulletin of Marine Science* 93(4): 997-1007. <https://doi.org/10.5343/bms.2017.1010>
36. *Burgess, M. G., C. Costello, A. Fredston-Hermann, M. L. Pinsky, S. D. Gaines, D. Tilman, and S. Polasky* (2017) Range contraction enables harvesting to extinction. *Proceedings of the National Academy of Sciences* 114(15): 3945-3950. <https://doi.org/10.1073/pnas.1607551114>
35. *Webster, M. S., M. A. Colton, E. S. Darling, J. Armstrong, M. L. Pinsky, N. Knowlton, and D. E. Schindler* (2017) Who should pick the winners of climate change? *Trends in Ecology and Evolution* 32(3): 167-173. <https://doi.org/10.1016/j.tree.2016.12.007>
34. *Tommasi, D., C. A. Stock, A. J. Hobday, R. Methot, I. C. Kaplan, P. Eveson, K. Holsman, T. J. Miller, S. Gaichas, M. Gehlen, A. Pershing, G. A. Vecchi, R. Msadek, T. Delworth, C. M. Eakin, M. A. Haltuch, R. Séférian, C. M. Spillman, J. R. Hartog, S. Siedlecki, J. F. Samhour, B. Muhling, R. G.*

- Asch, **M. L. Pinsky**, V. S. Saba, S. B. Kapnick, C. F. Gaitan, R. R. Rykaczewski, M. A. Alexander, Y. Xue, K. V. Pegion, P. Lynch, M. R. Payne, T. Kristiansen, P. Lehodey, and C. Werner (2017) Managing living marine resources in a dynamic environment: the role of seasonal to decadal climate forecasts. *Progress in Oceanography* 152: 15-49. <https://doi.org/10.1016/j.pocean.2016.12.011>  
Highly Cited Paper (Essential Science Indicators)
33. **Pinsky, M. L.**, P. Saenz-Agudelo, O. Salles, G. Almany, M. Bode, M. Berumen, S. Andréfouët, S. Thorrold, G. Jones, and S. Planes. (2017) Marine dispersal scales are congruent over evolutionary and ecological time. *Current Biology* 27: 149-154. <https://doi.org/10.1016/j.cub.2016.10.053>
32. Morley, J. W., R. D. Batt, **M. L. Pinsky** (2017) Marine assemblages respond rapidly to winter climate variability. *Global Change Biology* 23(7): 2590-2601. <https://doi.org/10.1111/gcb.13578>
31. Kleypas, J., D. Thompson, F. Castruccio, E. Curchitser, **M. L. Pinsky**, and J. Watson (2016) Larval connectivity across temperature gradients, and its potential effect on heat tolerance in coral populations. *Global Change Biology* 22: 3539-3549. <https://doi.org/10.1111/gcb.13347>
30. Thorson, J., **M. L. Pinsky**, and E. Ward (2016) Model-based inference for estimating shifts in species distribution, area occupied, and center of gravity. *Methods in Ecology and Evolution* 7(8): 990-1002. <https://doi.org/10.1111/2041-210X.12567>
29. Kleisner, K. M., M. J. Fogarty, S. McGee, A. Barnett, P. Fratantoni, J. Greene, J. A. Hare, S. Lucy, C. McGuire, J. Odell, V. S. Saba, L. Smith, K. J. Weaver and **M. L. Pinsky** (2016) The effects of sub-regional climate velocity on the distribution and spatial extent of marine species assemblages. *PLOS ONE* 11(2): e0149220. <https://doi.org/10.1371/journal.pone.0149220>
28. Fenichel, E. P., S. A. Levin, B. McCay, K. St. Martin, J. K. Abbott, and **M. L. Pinsky**. (2016) Wealth reallocation and sustainability under climate change. *Nature Climate Change* 6: 237-244. <https://doi.org/10.1038/NCLIMATE2871>  
Press coverage by *Newsweek*, *Christian Science Monitor*, *The Weather Channel*
27. Cheung, W. W. L., T. L. Frölicher, R. M. Asch, M. C. Jones, **M. L. Pinsky**, G. Reygondeau, K. B. Rodgers, R. R. Rykaczewski, J. L. Sarmiento, C. Stock, and J. R. Watson (2016) Building confidence in projections of the responses of living marine resources to climate change. *ICES Journal of Marine Science* 73 (5): 1283-1296. <https://doi.org/10.1093/icesjms/fsv250>
26. Fuller, E., E. Brush, and **M. L. Pinsky** (2015) The persistence of populations facing climate shifts and harvest. *Ecosphere* 6(9): 153. <https://doi.org/10.1890/ES14-00533.1>
25. **Pinsky, M. L.** and D. Byler. (2015) Fishing, fast growth, and climate variability increase the risk of collapse. *Proceedings of the Royal Society B: Biological Sciences* 282: 20151053. <https://doi.org/10.1098/rspb.2015.1053>  
Press coverage by *BBC News*, *ClimateWire*, and others.
24. McCauley, D. J., **M. L. Pinsky**, S. R. Palumbi, J. A. Estes, F. Joyce, and R. R. Warner (2015) Marine defaunation: animal loss in the global ocean. *Science* 347: 1255641. <https://doi.org/10.1126/science.1255641>  
Press coverage by *New York Times (front page)*, *PBS News Hour*, *National Public Radio*, *The Boston Globe*, *Scientific American*, *Discovery*, *The Daily Beast*, *CNBC*, *Bill Maher*, *ABC7 Los Angeles*, *NJTV evening news*, and others. Rated “Exceptional” on *Faculty of 1000*  
Hot Paper and Highly Cited Paper in Ecology/Environment (Essential Science Indicators)
23. Guannel, G., P. Ruggiero, J. Faries, K. Arkema, **M. Pinsky**, G. Gelfenbaum, A. Guerry, and C.-K. Kim. (2015) Integrated modeling framework to quantify the coastal protection services supplied by vegetation. *Journal of Geophysical Research - Oceans* 120(1): 324-345. <https://doi.org/10.1002/2014JC009821>

22. **Pinsky, M. L.** and N. J. Mantua. (2014) Emerging adaptation approaches for climate-ready fisheries management. *Oceanography* 27(4): 146-159. <https://doi.org/10.5670/oceanog.2014.93>
21. Mendez, M., F. Kershaw, S. Palumbi, **M. Pinsky**, C. Ray, H. Rosenbaum, A. Subramaniam (2014). Marine Spatial Planning 2.0: genes and satellites to conserve seascape dynamics. *Aquatic Conservation* 24(6): 742-744. <https://doi.org/10.1002/aqc.2533>
20. Thompson, D., F. Castruccio, J. Kleypas, J. Watson, E. Curchitser, and **M. Pinsky** (2014) Variability in reef connectivity in the Coral Triangle. *Reef Encounters* 29(2): 46-51
19. Aslan, C.\*, **M. L. Pinsky\***, M. Ryan\*, S. Souther\*, and K. Terrell\* (2014) Cultivating creativity in conservation science. *Conservation Biology* 28(2): 345-353. <https://doi.org/10.1111/cobi.12173>  
\* All authors contributed equally
18. de Bruyn, M., **M. L. Pinsky**, B. Hall, P. Koch, C. Baroni, and A. R. Hoelzel. (2014) Rapid increase in southern elephant seal genetic variation after a founder event. *Proceedings of the Royal Society B: Biological Sciences* 281: 20133078. <https://doi.org/10.1098/rspb.2013.3078>
17. **Pinsky, M. L.** and S. R. Palumbi (2014) Meta-analysis reveals lower genetic diversity in overfished populations. *Molecular Ecology* 23: 29-39. <https://doi.org/10.1111/mec.12509>  
Cover article. News & Views perspective by Allendorf et al. 2014  
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16. Nelson, E., P. Kareiva, M. Ruckelshaus, K. Arkema, G. Geller\*, E. Girvetz\*, D. Goodrich\*, V. Matzek\*, **M. Pinsky\***, W. Reid\*, M. Saunders\*, D. Semmens\*, and H. Tallis\*. (2013) Climate change's impact on key ecosystem services and the human well-being they support in the United States. *Frontiers in Ecology and the Environment* 11(9): 483-493. <https://doi.org/10.1890/120312>  
\* Authors are alphabetical
15. **Pinsky, M. L.**, B. Worm, M. J. Fogarty, J. L. Sarmiento, and S. A. Levin (2013) Marine taxa track local climate velocities. *Science* 341: 1239-1242. <https://doi.org/10.1126/science.1239352>  
Press coverage by *BBC Radio*, *LA Times*, *CBC*, *ScienceNow*, *ClimateWire*, and others. Rated "Exceptional" on *Faculty of 1000*  
Highly Cited Paper in Ecology/Environment (Essential Science Indicators)
14. **Pinsky, M. L.**, G. Guannel, and K. K. Arkema (2013) Quantifying wave attenuation to inform coastal habitat conservation. *Ecosphere* 4: art95. <https://doi.org/10.1890/ES13-00080.1>
13. **Pinsky, M. L.** and M. Fogarty (2012) Lagged social-ecological responses to climate and range shifts in fisheries. *Climatic Change Letters* 115(3): 883-891. <https://doi.org/10.1007/s10584-012-0599-x>  
Highlighted in *Nature Climate Change* (doi:10.1038/nclimate1765) and in *The Working Waterfront*.
12. Kim, C.-K., J. E. Toft, M. Papenfus, G. Verutes, A. D. Guerry, M. H. Ruckelshaus, K. K. Arkema, G. Guannel, S. A. Wood, J. R. Bernhardt, H. Tallis, M. L. Plummer; B. S. Halpern, **M. L. Pinsky**, M. W. Beck, F. Chan, K. Chan, P. S. Levin, S. Polasky (2012) Catching the right wave: evaluating wave energy resources and potential compatibility with existing marine and coastal uses. *PLoS One* 7(11): e47598. <https://doi.org/10.1371/journal.pone.0047598>
11. **Pinsky, M. L.**, S. R. Palumbi, S. Andréfouët, S. Purkis (2012) Open and closed seascapes: where does habitat patchiness create populations with high fractions of self-recruitment? *Ecological Applications* 22(4): 1257-1267. <https://doi.org/10.1890/11-1240.1>
10. Guerry, A. D., M. H. Ruckelshaus, K. Arkema, J. R. Bernhardt, G. Guannel, C. K. Kim, M. Marsik, M. Papenfus, **M. L. Pinsky**, J. E. Toft, G. Verutes, S. A. Wood, M. Beck, F. Chan, K. M. A. Chan, G. Gelfenbaum, B. Gold, B. S. Halpern, B. Labiosa, S. Lester, P. S. Levin, M. McField, M. Plummer, S. Polasky, P. Ruggiero, D. A. Sutherland, H. Tallis (2012) Modeling benefits from nature: Using

ecosystem services to inform coastal and marine spatial planning. *International Journal of Biodiversity Science, Ecosystem Services & Management* 8(1-2): 107-121.

<https://doi.org/10.1080/21513732.2011.647835>

9. O'Connor, M. I., E. R. Selig, **M. L. Pinsky**, and F. Altermatt (2012) Toward a conceptual synthesis for climate change responses. *Global Ecology and Biogeography* 21: 693-703.  
<https://doi.org/10.1111/j.1466-8238.2011.00713.x>
8. **Pinsky, M. L.**, O. P. Jensen, D. Ricard, and S. R. Palumbi (2011) Unexpected patterns of fisheries collapse in the world's oceans. *Proceedings of the National Academy of Sciences* 108(20): 8317-8322. <https://doi.org/10.1073/pnas.1015313108>  
Covered by *Nature News*, *CBC*, *NewScientist*, and others. Recommended on *Faculty of 1000*  
Highly Cited Paper in Ecology/Environment (Essential Science Indicators)
7. Woodson, C. B., J. A. Barth, O. M. Cheriton, M. A. McManus, J. P. Ryan, L. Washburn, K. N. Carden\*, B. S. Cheng\*, J. Fernandes\*, L. E. Garske\*, T. C. Gouhier\*, A. J. Haupt\*, K. T. Honey\*, M. F. Hubbard\*, A. Iles\*, L. Kara\*, M. C. Lynch\*, B. Mahoney\*, M. Pfaff\*, **M. L. Pinsky\***, M. J. Robart\*, J. S. Stewart\*, S. J. Teck\*, and A. True\* (2011) Observations of internal wave packets propagating along-shelf in northern Monterey Bay. *Geophysical Research Letters* 38, L01605.  
<https://doi.org/10.1029/2010GL045453>  
\* Authors are alphabetical
6. **Pinsky, M. L.**, H. Montes, Jr., and S. R. Palumbi (2010) Using isolation by distance and effective density to estimate dispersal scales in anemonefish. *Evolution* 64(9): 2688-2700.  
<https://doi.org/10.1111/j.1558-5646.2010.01003.x>
5. **Pinsky, M. L.**, S. Newsome, B. R. Dickerson, Y. Fang, M. van Tuinen, D. Kennett, R. R. Ream, and E. A. Hadly (2010) Dispersal provided resilience to range collapse in a marine mammal: insights from the past to inform conservation biology. *Molecular Ecology* 19: 2418-2429.  
<https://doi.org/10.1111/j.1365-294X.2010.04671.x>  
Highlighted in *Science* 330: 582 "Going back to the future to understand climate change"
4. Jackson, J. A., **M. L. Pinsky**, C. S. Baker (2009) Erratum: How many whales were there after whaling? Inference from contemporary mtDNA diversity (vol. 17, pg. 236, 2008). *Molecular Ecology* 18(19): 4134-4135. <https://doi.org/10.1111/j.1365-294X.2009.04335.x>
3. **Pinsky, M. L.**, D. Springmeyer, M. Goslin, and X. Augerot (2009) Range-wide selection of catchments for Pacific salmon conservation. *Conservation Biology* 23(3): 680-691.  
<https://doi.org/10.1111/j.1523-1739.2008.01156.x>  
Used in testimony before the United States Senate, Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, April 15, 2010.
2. Springmeyer, D., **M. Pinsky**, N. Portley, J. Bonkowski, and P. Rand (2007) Prioritization of Sakhalin watersheds for salmonid conservation. *Transactions of the Sakhalin Research Institute of Fisheries and Oceanography* 9: 264-293 (in Russian)
1. Zwirn, M., **M. Pinsky**, and G. Rahr (2005) Angling ecotourism: Issues, guidelines and experience from Kamchatka. *Journal of Ecotourism* 4(1): 16-31. <https://doi.org/10.1080/14724040508668435>

### Book chapters

4. Selden, R. L. and **M. L. Pinsky** (2019) Climate change adaptation and spatial fisheries management. Pp. 207-214 in *Predicting Future Oceans: Sustainability of Ocean and Human Systems Amidst Global Environmental Change* (W. Cheung, Y. Ota, and A. Cisneros-Montemayor, editors), Elsevier, Amsterdam, Netherlands



3. **Pinsky, M. L.** and **R. L. Selden** (2017) Climate variability, climate change, and conservation in a dynamic ocean. Pp. 23-38 in *Conservation for the Anthropocene Ocean: Interdisciplinary science in support of nature and people* (P. S. Levin and M. R. Poe, editors), Elsevier/Academic Press, Philadelphia, PA
2. Palumbi, S. R. and **M. L. Pinsky** (2013) Marine dispersal, ecology, and conservation. Pp. 57-83 in *Marine Community Ecology* (M. Bertness, J. Bruno, B. Silliman, and J. Stachowicz, editors), Sinauer Press, Sunderland, MA
1. **Pinsky, M. L.**, K. J. Kroeker, C. A. Logan, and D. J. Barshis (2013) Marine conservation in a changing climate. In *Encyclopedia of Biodiversity, 2<sup>nd</sup> Edition* (S. Levin, editor), Academic Press, San Diego

#### ***Proceedings, reports and popular articles***

13. **Kitchel, Z. J., R. M. W. J. Bandara, J. T. Bos, R. D. Clark, D. L. Forrest\*, and M. L. Pinsky** (2021) Review of “Ocean Recovery: A Sustainable Future for Global Fisheries?” by Ray Hilborn and Ulrike Hilborn. *Fisheries* 46(4): 201 <https://doi.org/10.1002/fsh.10580>
12. Kong, S., J. Bai, J. H. Lee, D. Chen, A. Allyn, M. Stuart\*, **M. Pinsky**, K. Mills, and C. Gomes (2020) Deep Hurdle Networks for Zero-Inflated Multi-Target Regression: Application to Multiple Species Abundance Estimation. Pages 4375–4381 *Proceedings of the Twenty-Ninth International Joint Conference on Artificial Intelligence*. International Joint Conferences on Artificial Intelligence Organization, Yokohama, Japan. <https://doi.org/10.24963/ijcai.2020/603>
11. Stewart Lowndes, J. S., H. E. Froehlich, A. Horst, N. Jayasundara, **M. L. Pinsky**, A. C. Stier, N. O. Therkildsen, and C. L. Wood (2019). Supercharging research with open data science and teamwork. *Nature*. <https://doi.org/10.1038/d41586-019-03335-4>
10. **Pinsky, M. L.**, G. Reygondeau, R. Caddell, J. Palacios-Abrantes, J. Spijkers, and W. W. L. Cheung (2018) Governance for species on the move needs mechanisms for newly shared fisheries. *Science* Available from <http://science.sciencemag.org/content/361/6408/1208.2/tab-e-letters>
9. Nippon Foundation-Nereus Program (2017) Oceans and Sustainable Development Goals: Co-benefit, climate change, and social equity. Vancouver, 28 p. <http://www.nereusprogram.org>  
**M. L. Pinsky** and **R. Selden** were contributing authors.
8. Clarke, L., R. He, S. Arnott, J. Ballenger, M. Karnauskas, K. Lindeman, R. Mordecai, **J. W. Morley**, P. Ortner, C. Paris, **M. L. Pinsky**, M. Reichert, M. Roffer, R. Rykaczewski, P. Sheng, G. Voulgaris, and W. White (2016). Policy Considerations for South Atlantic Climate Variability, Fisheries and Essential Fish Habitats. (A report prepared for the South Atlantic Fishery Management Council.) Available from [https://safmc.net/download/SAFMC\\_HabitatPolicy\\_ClimateVariabilityFisheries\\_Final\\_Dec2016.pdf](https://safmc.net/download/SAFMC_HabitatPolicy_ClimateVariabilityFisheries_Final_Dec2016.pdf)
7. **Pinsky, M. L.** (2016). Opinion: These two changes in the ocean are downright scary. *MarketWatch*, April 22, 2016. Available from <http://www.marketwatch.com/story/these-two-changes-in-the-ocean-are-downright-scary-2016-04-22>.
6. Gaichas, S., J. Hare, **M. Pinsky**, G. DePiper, O. Jensen, T. Lederhouse, J. Link, D. Lipton, R. Seagraves, J. Manderson, and M. Clark. (2015). A White Paper to Inform the Mid-Atlantic Fishery Management Council on the Impact of Climate Change on Fishery Science and Management: April 2015 (second draft). Available from [https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/558834e8e4b054917999f425/1434989800817/Climate+Change+and+VariabilityWhite+Paper\\_BBook\\_second\\_draft\\_final.pdf](https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/558834e8e4b054917999f425/1434989800817/Climate+Change+and+VariabilityWhite+Paper_BBook_second_draft_final.pdf)

5. **Pinsky, M. L.** (2014). Effects of climate velocity on fish and fisheries. Pp. 175-184 in J. D. Gilden (ed.), *Managing Our Nation's Fisheries 3: Advancing Sustainability*. Proceedings of a conference on fisheries management in the United States held in Washington, DC, on May 6-9, 2013. Pacific Fisheries Management Council (Portland, OR)
4. Kareiva, P., M. Ruckelshaus, K. Arkema, G. Geller, E. Girvetz, D. C. Goodrich, E. Nelson, V. Matzek, **M. Pinsky**, M. Saunders, D. Semmens, and H. Tallis (2012) Impacts of Climate Change on Ecosystem Services. Chapter 4 of M. D. Staudinger, N. B. Grimm, A. Staudt, S. L. Carter, F. S. Chapin III, P. Kareiva, M. Ruckelshaus, and B. A. Stein. *Impacts of Climate Change on Biodiversity, Ecosystems, and Ecosystem Services: Technical Input to the 2013 National Climate Assessment*. Cooperative Report to the 2013 National Climate Assessment. 296 p.  
Press coverage by *New York Times*, *ClimateWire*, and others.
3. **Pinsky, M. L.** and H. Montes, Jr. (2010) Estimating dispersal in marine fish to improve resilience to climate change. *Integrated Marine Biogeochemistry and Ecosystem Research (IMBER) Update* 16
2. Varney, A., P. Christie, G. Labrado, R.-L. Eisma-Osorio, and **M. Pinsky** (2010) Designing and planning a network of marine protected areas. Coastal Conservation and Education Foundation (Cebu, Philippines) and School of Marine Affairs, University of Washington (Seattle, WA)
1. **Pinsky, M. L.** and G. E. Wannier (2010) Managing marine ecosystems for resilience to climate change. *Stanford Journal of Law, Science, and Policy* 2: i-iv

## GRANTS AND FELLOWSHIPS

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| 2021-2021 | NOAA Cooperative Institute for the North Atlantic Region, "Tracking North American marine species distributions: 2021 Update." M. Pinsky. \$34,999.  |
| 2020-2023 | NOAA Climate Program Office 2020, Coastal and Ocean Climate Applications (COCA) Fisheries and Climate Program, Understanding Climate Impacts on Fish Stocks and Fisheries to Inform Sustainable Fisheries Management: "Northeast Climate Integrated Modeling to Meet Ocean Decision Challenges." Kerr, L., A. Pershing, K. Mills, E. Curchitser, M. Pinsky, J. R. Wiedenmann, T. Miller, J. Deroba, V. Saba. \$1,274,908 (\$222,852 to Rutgers). |
| 2019-2022 | Lenfest Ocean Program, The Pew Charitable Trusts, "Near-term forecasts of species distributions for fisheries management." M. Pinsky. \$299,824.   |
| 2017-2022 | NSF Partnerships for International Research and Education, "PIRE: Centennial Genetic and Species Transformations in the Epicenter of Marine Biodiversity." Carpenter, K. E., D. Barshis, C. Bird, M. L. Pinsky, B. Polidoro. \$4,606,918 (\$834,665 to Rutgers).   |
| 2019-2021 | NOAA Climate and Societal Interactions (CSI)/ Coastal and Ocean Climate Applications (COCA), "Adapting to changes in fishing opportunity portfolios: abundance, availability, and access." Ramenzoni, V., C. Free, O. Jensen, M. Pinsky, J. Wiedenmann. \$299,375.   |
| 2019-2020 | NOAA Cooperative Institute for the North Atlantic Region, "Tracking changes in Canadian marine species distributions." M. Pinsky. \$51,124.  |
| 2019-2020 | The Eppley Foundation for Research, "Investigating Expression Quantitative Trait Loci in Bats Surviving White-nose Syndrome." Maslo, B. and M. L. Pinsky. \$24,323.  |
| 2018-2020 | New Jersey Sea Grant, "Developing indices of vulnerability to climate change for ground fishing communities in the Northeast." St. Martin, K. and M. Pinsky. \$174,500.  |
| 2018-2020 | New Jersey Sea Grant, "Quantifying the effects of a changing climate on summer flounder recruitment." Pinsky, M.L., C. Chambers, and J. Hoey. \$139,859.   |
| 2017-2020 | The Nature Conservancy, "Identifying conservation and restoration strategies to enhance the evolutionary capacity of Caribbean corals." Colton, M., M. L. Webster, M.L. Pinsky, and D. Schindler. \$420,607.   |

- 2016-2020 NSF Dynamics of Coupled Natural-Human Systems, “CNH-L: The dynamics of adaptation to climate-driven variability in California Current fisheries and fishing communities.” Abbott, J., D. Holland, A. Punt, M. Poe, and M. Pinsky. \$1,499,962 (\$444,236 to Rutgers)
- 2016-2020 Nippon Foundation, “Nereus Program Expansion.” Cheung, W., Y. Ota, D. Pauly, W. Swartz, D. Gascuel, T. Frölicher, E. Sunderland, J. Kittinger, A. Boustany, M. Pinsky, R. Rykaczewski, H. Hosein, and Q. Hanich. \$140,000 to Rutgers.
- 2018-2019 NOAA Cooperative Institute for the North Atlantic Region. “Projecting economic impacts of climate change on North American marine fisheries.” Pinsky, M. L., \$14,479.
- 2017-2019 NOAA Fisheries and the Environment (FATE), “Creating and evaluating indices of climate-induced changes in spatial distributions of North Pacific fishery resources.” Hazen, E., R. Selden, S. Bograd, K. Holsman, M. Pinsky, J. Samhuri, M. Haltuch. \$191,943 (\$50,722 to Rutgers).
- 2016-2019 Gordon and Betty Moore Foundation, “Evolutionary adaptation potential: From novel science to practical application.” M. Colton, M. Webster, D. Schindler, M. Pinsky, \$1,000,541 (\$431,551 to Rutgers).
- 2017-2018 Wildlife Management Institute, “Identifying genetic signatures of selection in multiple bat hosts.” Maslo, B., S. Gignoux-Wolfsohn, M. Pinsky, B. Hines. \$39,913.
- 2016-2018 NOAA Cooperative Institute for the North Atlantic Region. “Projecting and communicating changes in North American marine species distributions.” Pinsky, M. L., \$94,132.
- 2015-2018 NOAA Cooperative Institute for the North Atlantic Region. “Tracking changes in North American marine species distributions,” Pinsky, M. L., \$48,000.
- 2014-2018 NSF Division of Ocean Sciences. “Coastal SEES Collaborative Research: Adaptations of fish and fishing communities to rapid climate velocities.” Pinsky, M. L., K. St. Martin, B. McCay, E. Fenichel, S. Levin, and J. Olson \$1,396,554 (\$1,110,598 to Rutgers)
- 2015-2017 U.S. Fish and Wildlife Service. “Are Bat Populations Infected with White-nose Syndrome Undergoing Rapid Natural Selection?” B. Maslo, N. Fefferman, and M. L. Pinsky. \$395,630.
- 2015-2017 Gordon and Betty Moore Foundation. “Managing Coral Reefs for Adaptation Potential.” Webster, M., M. Colton, M. Pinsky, and D. Schindler. \$500,000 (\$23,859 to Rutgers)
- 2015-2017 National Oceanic and Atmospheric Administration (NOAA) Climate Program Office. “Climate velocity over the 21st century and its implications for fisheries management in the Northeast U.S.” Pinsky, M. and R. Seagraves. \$299,896.
- 2015-2016 The Pew Charitable Trusts. “Climate Impacts Projections for U.S. Fisheries.” Pinsky, M. \$180,745.
- 2014-2016 Alfred P. Sloan Research Fellowship in Ocean Sciences. Pinsky, M. L. \$50,000
- 2014-2016 New Jersey Sea Grant. “Genetic monitoring to improve fish stock assessments.” Pinsky, M.L., O. Jensen, and K. Able. \$139,993
- 2014-2016 Mid-Atlantic Sea Grant. “Understanding the impacts of climate change on the distribution, population connectivity, and fisheries for summer flounder (*Paralichthys dentatus*) in the Mid-Atlantic.” Pinsky, M. L., J. Nye, J. Fodrie, K. Able, O. Jensen, H. Kim, C. Kennedy. \$505,765 (\$139,990 to Rutgers)
- 2015 The Pew Charitable Trusts. “South Atlantic Climate Impact Analyses.” Pinsky, M. L. \$73,241.
- 2014-2015 NSF Division of Ocean Sciences. “RAPID: Mega-typhoon impacts on the metapopulation resilience of coral reef fishes.” Pinsky, M. L. \$93,009
- 2014-2015 Oak Ridge Associated Universities, Ralph E. Powe Junior Faculty Enhancement Award. “Mega-Typhoon Impacts on the Resilience of Coral Reef Fishes.” Pinsky, M. L. \$10,000

- 2014-2015 NOAA Cooperative Institute for the North Atlantic Region. “Indicators of marine climate impacts in North America.” Pinsky, M. L. \$63,000
- 2013-2014 NOAA Cooperative Institute for the North Atlantic Region. “Assessing marine climate impacts in North America using species range shifts and climate velocity.” Pinsky, M. L. \$39,990
- 2011-2013 David H. Smith Conservation Research Fellowship. Pinsky, M. L. \$185,678
- 2011-2013 NSF Postdoctoral Research Fellowship in Biology, Intersections of Math and Biology *offered but declined*
- 2012 Princeton Environmental Institute Sustainability Challenge. Sarmiento, J. L. (& Pinsky, M. L.) \$4,050
- 2009-2011 National Science Foundation Graduate Research Fellowship. Pinsky, M. L. ~\$62,000
- 2006-2009 National Defense Science & Engineering Graduate Fellowship. Pinsky, M. L. ~\$93,000
- 2008 International Society for Reef Studies/Ocean Conservancy Fellowship. Pinsky, M. L. \$14,901

## TALKS AND SEMINARS

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### *Keynote and Plenary*

- 2019 Keynote speaker, Centre for Ocean Life Annual Retreat, Technical University of Denmark (DTU), Elmejøj, Denmark
- 2019 Plenary invited speaker, Species on the Move (SOTM) conference, Kruger National Park, South Africa
- 2018 Plenary speaker, Rutgers Climate Symposium on “Climate Change and Food Security,” Piscataway, NJ
- 2018 Keynote speaker, International Mini-Symposium: Spatiotemporal dynamics of aquatic organisms in a changing world - from genetics to macroecology, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Yokohama, Japan
- 2018 Keynote speaker, 34th Annual Meeting of the Society of Population Ecology, Tokyo, Japan
- 2018 Plenary speaker, Ocean Global Change Biology Gordon Research Conference, Waterville Valley, NH
- 2018 “Rising Star in Ecology” speaker at the Atwood Colloquium in Ecology & Evolution, University of Toronto, Toronto, ON
- 2017 Keynote speaker, Species Distribution Modeling Symposium, Center for Biodiversity and Global Change, Yale University, New Haven, CT
- 2017 Keynote address, 11th International Conference and Workshop on Lobster Biology and Management, Portland, ME
- 2012 Keynote speaker for Oceans of Change: ICES/PICES Conference for Early Career Scientists, Mallorca, Spain

### *Invited*

- 2021 Hatfield Marine Science Center, Oregon State University
- 2021 Department of Environmental Studies, University of California Santa Cruz, Santa Cruz, CA
- 2020 CalCOFI Conference
- 2020 Department of Biology, Dalhousie University, Halifax, Canada
- 2020 Ecological Society of America annual meeting
- 2020 Princeton Environmental Institute (PEI), Princeton University, Princeton, New Jersey
- 2020 Swiss Federal Institute of Aquatic Science and Technology (EAWAG), Dübendorf, Switzerland
- 2020 Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB), Berlin, Germany
- 2020 Institute of Marine Ecosystem and Fishery Science, Universität Hamburg, Hamburg, Germany

- 2019 Institute for Chemistry and Biology of the Marine Environment, Carl von Ossietzky University of Oldenburg, Oldenburg, Germany
- 2019 Det Norske Videnskaps-Akademi (Norwegian Academy of Science and Letters), Oslo, Norway
- 2019 DTU-Aqua, Technical University of Denmark (DTU), Lyngby, Denmark
- 2019 German Centre for Integrative Biodiversity Research (iDiv) Halle-Jenna-Leipzig, Leipzig, Germany.
- 2019 Department of Earth System Science, University of California Irvine, Irvine, CA.
- 2019 Northeast Climate Integrated Modeling Workshop, Gulf of Maine Research Institute, Portland, ME.
- 2019 Department of Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI.
- 2019 Hopkins Marine Station, Department of Biology, Stanford University, Pacific Grove, CA
- 2018 Department of Biology, Boston University, Boston, MA
- 2018 Distinguished Early Career Contributions in Coastal and Climate Science, East Carolina University, Greenville, NC
- 2018 Invited speaker, 4th International Symposium on the Effects of Climate Change on the World's Oceans, ICES/PICES, Washington, DC
- 2018 Department of Marine and Coastal Sciences, Rutgers University, New Brunswick, NJ
- 2018 COMPASS Panel on Making Your Science Matter: Engaging with Decision Makers to Navigate Ocean Change, AGU/ASLO/TOS Ocean Sciences Meeting, Portland, OR
- 2018 Bevan Series on Sustaining Fisheries in a Changing Climate, University of Washington, Seattle, WA
- 2017 Department of Human Ecology, Rutgers University, New Brunswick, NJ
- 2017 Department of Natural Resources, Cornell University, Ithaca, NY
- 2017 Ecological Society of America annual meeting, Portland, OR
- 2017 Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ
- 2017 Institute for the Oceans and Fisheries, University of British Columbia, Vancouver, BC, Canada
- 2017 Rutgers Climate Institute, Rutgers University, New Brunswick, NJ
- 2016 Marine Science Center, Northeastern University, Nahant, MA
- 2016 Lovén Centre Tjärnö, University of Gothenburg, Strömstad, Sweden
- 2016 Center for Ecological and Evolutionary Synthesis, University of Oslo, Oslo, Norway
- 2016 DTU-Aqua, Copenhagen, Denmark
- 2016 International Council for Exploration of the Sea Annual Meeting, Riga, Latvia
- 2016 Stockholm Seminar, The Royal Swedish Academy of Sciences, Stockholm, Sweden
- 2016 Department of Biology, George Washington University, Washington, DC
- 2016 Department of Biology, University of Pennsylvania, Philadelphia, PA
- 2015 Department of Biology, Temple University, Philadelphia, PA
- 2015 Pew Fellows Program in Marine Conservation Annual Meeting, Rio Grande, Puerto Rico
- 2015 Ecological Society of America, Baltimore, MD
- 2015 Application of Seasonal to Decadal Climate Predictions for Marine Resource Management Workshop, NOAA Geophysical Fluid Dynamics Laboratory, Princeton, NJ
- 2015 Discussant for "Grand Challenges in Theoretical Ecology," by Bob Holt and David Tilman, Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ
- 2015 Department of Ecology, Evolution, and Environmental Biology, Columbia University, New York City, NY
- 2015 Department of Ecology and Evolutionary Biology, Yale University, New Haven, CT
- 2015 Third International Symposium: Effects of Climate Change on the World's Oceans. Santos City, Brazil
- 2015 Interdisciplinary Program in Ocean Change, University of Washington, Seattle, WA
- 2014 Dept. of Ecology, Evolution, and Marine Biology seminar, University of California, Santa Barbara, CA
- 2014 American Society of Naturalists Young Investigators' Symposium, Evolution2014. Raleigh, NC

- 2014 Biology Seminar, University of Massachusetts Boston, Boston, MA
- 2013 Ecology & Evolution Graduate Seminar Series. Rutgers University, Rutgers, NJ
- 2013 School of Marine and Atmospheric Studies, Stony Brook University, Stony Brook, NY
- 2013 Bridging the Climate Divide: Informing the Response to Hurricane Sandy and Implications for Future Vulnerability, Rutgers Climate Institute, New Brunswick, NJ
- 2013 International Congress for Conservation Biology, Baltimore, MD
- 2013 National Adaptation Forum, Denver, CO
- 2012 Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ
- 2012 American Institute of Fisheries Research Biologists Annual Meeting. New Bedford, MA
- 2011 Harvest Fisheries Seminar, Bedford Inst. of Oceanography, Dartmouth, Nova Scotia
- 2011 Dept. of Biology Seminar, Dalhousie University, Halifax, Nova Scotia
- 2011 University of Maine, Machias, ME
- 2011 Rutgers Ecology and Evolution Graduate Program Seminar Series, New Brunswick, NJ
- 2011 American Fisheries Society Annual Meeting, Seattle, WA
- 2011 International Marine Conservation Congress II, Victoria, BC
- 2010 National Oceanic and Atmospheric Administration, Geophysical Fluid Dynamics Laboratory Seminar, Princeton, NJ
- 2008 Riversymposium, Brisbane, Australia

### ***Contributed***

- 2020 GEO BON Open Science Conference (virtual)
- 2019 OceanVisions2019 Conference, Atlanta, GA
- 2018 AGU/ASLO/TOS Ocean Sciences Meeting, Portland, OR
- 2017 Ecological Society of America annual meeting, Portland, OR
- 2017 New York Area Population Genomics Workshop, New York City, NY
- 2016 13<sup>th</sup> International Coral Reef Symposium, Honolulu, HI
- 2016 Ocean Sciences Meeting, New Orleans, LA
- 2015 Third International Symposium: Effects of Climate Change on the World's Oceans. Santos City, Brazil
- 2014 Ecological Society of America, Sacramento, CA
- 2014 Ocean Sciences Meeting, Honolulu, HI
- 2014 21<sup>st</sup> Century Naturalists: Integrating Pattern and Process to Understand Biodiversity. American Society of Naturalists, Pacific Grove, CA
- 2013 International Council for Exploration of the Sea 2013 Annual Science Conference, Reykjavik, Iceland
- 2012 American Fisheries Society, St. Paul, MN
- 2012 Ecological Society of America Conference, Portland, OR
- 2012 International Coral Reef Symposium, Cairns, Australia
- 2012 2nd International Symposium: Effects of the Climate Change on the World's Oceans, ICES/PICES, Yeosu, South Korea.  
Best oral presentation
- 2011 Ecological Society of America Annual Meeting, Austin, TX
- 2011 Society for the Study of Evolution Annual Meeting, Norman, OK  
Covered by *NewScientist*, 15 July 2011, "Overfishing eats away at genetic diversity of fish."
- 2010 Western Society of Naturalists Annual Meeting, San Diego, CA
- 2010 Ecological Society of America Annual Meeting, Pittsburgh, PA
- 2010 Society for the Study of Evolution Annual Meeting, Portland, OR
- 2009 Western Society of Naturalists Annual Meeting, Monterey, CA
- 2009 Society for the Study of Evolution Annual Meeting, Moscow, ID
- 2007 Western Society of Naturalists Annual Meeting, Ventura, CA
- 2007 Society for the Study of Evolution Annual Meeting, Christchurch, New Zealand

2006 Western Society of Naturalists Annual Meeting, Redmond, WA

***Outreach, Policy, and Management***

- 2021 Mid-Atlantic Ocean Forum, panel on Conservation and Living Marine Resource Management in the Face of a Changing Climate
- 2020 South Atlantic Climate and Fisheries Workshop, South Atlantic Fisheries Management Council
- 2019 Science News webinar (public conversation with Carolyn Gramling, journalist)
- 2019 Coastal-Marine Ecosystem-Based Management Tools Network webinar
- 2018 OneNOAA seminar, National Oceanic and Atmospheric Administration (webinar)
- 2018 Convening speaker, “Fishing for Solutions in a Changing Ocean,” COMPASS Science and Decision Roundtable, Washington, DC
- 2017 World Conference of Science Journalists, San Francisco, CA
- 2017 Mid-Atlantic Blue Ocean Economy 2020, Monmouth University, West Long Branch, NJ
- 2017 NOAA Northeast Fisheries Science Center, Sandy Hook, NJ
- 2017 Coral Reef Alliance, Washington, DC
- 2016 Tides Of Change: Ocean change and implications for New England’s fisheries and fishing communities, a webinar organized by COMPASS
- 2016 Tides Of Change: A Capitol Hill Briefing on how oceans are changing and how those changes affect fisheries and fishing communities, organized by COMPASS, Capitol Hill Visitors Center, Washington, DC
- 2016 Aquarium of the Pacific, Long Beach, CA
- 2016 Mid-Atlantic Fisheries Management Council, Newark, DE
- 2015 Ecosystem-Based Management Tools Webinar, New Brunswick, NJ
- 2015 Mid-Atlantic Fisheries Management Council, Long Branch, NJ
- 2014 NOAA Fisheries Webinar. Co-presented with Jon Hare, Northeast Fisheries Science Center.
- 2014 Ecosystem-based Fisheries Management workshop, Pew Foundation, Washington, DC
- 2014 New Jersey Department of Environmental Protection, Trenton, NJ
- 2014 Mid-Atlantic Fisheries Management Council. New Bern, NC
- 2013 Climate Change and New England Fisheries - Observations, Impacts and Adaptation Strategies, Island Institute, Portland, ME  
Featured in *WMTW* evening news (*ABC*-affiliate in Portland, ME), the *Portland Press Herald*, and the *Bangor Daily News*.
- 2013 Capitol Hill briefing on “Climate Change and Fisheries” hosted by the American Fisheries Society, Rayburn Building, Washington, DC
- 2013 Managing Our Nations’ Fisheries 3, Washington, DC
- 2012 OneNOAA Seminar, National Oceanic and Atmospheric Administration, Silver Spring, MD
- 2009 Kelp Klimbers and Sea Otters Dive Club, Monterey, CA
- 2008 Marine Protected Area Network Planning Workshop, Coastal Conservation and Education Foundation, Cebu, Philippines

**TEACHING**

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- 2021 Molecular Ecology, Rutgers University
- 2021 Advanced Ecological Data Analysis (with R. Winfree), Rutgers University
- 2020 Seminar in Ecology
- 2019 Molecular Ecology, Rutgers University
- 2018 Ecology, Evolution, and Climate Change, Rutgers University
- 2018 Molecular Ecology, Rutgers University
- 2017 Advanced Ecological Data Analysis (with O. Jensen and R. Winfree), Rutgers University
- 2017 Molecular Ecology, Rutgers University
- 2016 Ecology, Evolution, and Climate Change, Rutgers University (with D. Adams)

2015 Molecular Ecology, Rutgers University  
 2014 Molecular Ecology, Rutgers University

## MENTORING

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### *Postdoctoral Advisor*

Brendan Reid, 2020-present  
 Alexa Fredston, 2020-present  
 Joyce Ong, 2017-2020  
 Lisa McManus, 2017-2020  
 Edward Tekwa, 2016-2020  
 Jude Kong, 2019-2019  
 Allison Dedrick, 2017-2019  
 Rebecca Selden, 2015-2019  
 Sarah Gignoux-Wolfsohn, 2016-2018 (co-advised with Brooke Maslo, Rutgers University)  
 Emily Moberg, 2016-2018  
 Tim Walsworth, 2016-2018 (co-advised with Daniel Schindler, U. Washington)  
 Adrian Stier, 2016 (co-advised with Daniel Schindler, U. Washington)  
 James Morley, 2015-2018  
 Ryan Batt, 2014-2017

### *Primary Graduate Advisor*

Kyra Fitz, Ph.D., Ecology & Evolution, 2020-present (projected 2025)  
 Jaelyn Bos, Ph.D., Ecology & Evolution, 2020-present (projected 2025)  
 Jeewantha Bandara, M.S., Ecology & Evolution (Fulbright Scholar, Sri Lanka), 2019-2021  
 Zoë Kitchel, Ph.D., Ecology & Evolution, 2017-present (projected 2022)  
 René Clark, Ph.D., Ecology & Evolution, 2017-present (projected 2022)  
 Katrina Catalano, Ph.D., Ecology & Evolution, 2016-present (projected 2021)  
 Jennifer Hoey, Ph.D., Ecology & Evolution, 2014-2020  
 Patrick Flanagan, M.S., Oceanography, 2014-2017

### *Graduate Committees*

Jake Lawlor, Ph.D. Ecology & Evolution (McGill University), 2020-present  
 Leon Tkacenko, Ph.D. Ecology & Evolution, 2020-present  
 Emily Manuel, M.S. Ecology & Evolution, 2020-present  
 Robert Kwiat, Ph.D. Ecology & Evolution, 2020-present  
 Laina Lockett, Ph.D., Ecology & Evolution, 2019-present  
 Seth Bromagen, Ph.D., Ecology & Evolution, 2019-present  
 Jason Toy, Ph.D., Ecology and Evolutionary Biology (U. California, Santa Cruz), 2018-present  
 Jem Baldisimo, Ph.D., Ecological Sciences (Old Dominion University), 2018-present  
 Ivan Lopez, M.S., Biology (Old Dominion University), 2018-present  
 Alexa Fredston-Hermann, Ph.D., Env. Science & Management (U. California, Santa Barbara), 2015-2020  
 Colleen Smith, Ph.D., Ecology & Evolution, 2015-2020  
 Michael Roswell, Ph.D., Ecology & Evolution, 2015-2019  
 Alicia Cheripka, M.S., Marine Biology, (U. North Carolina Wilmington), 2017-2018  
 Chris Free, Ph.D., Oceanography, 2016-2018  
 Oliver Stringham, Ph.D., Ecology & Evolution, 2016-2018  
 Raphael Valentin, Ph.D., Ecology & Evolution, 2015-2018  
 Nick Lorusso, Ph.D., Ecology & Evolution, 2014-2018  
 Bethanne Bruninga-Socolor, Ph.D., Ecology & Evolution, 2014-2018  
 Katie Nickerson, M.S. Oceanography, 2016-2017



Lisa McManus, Ph.D., Ecology & Evolutionary Biology (Princeton U.), 2014-2017  
 Sean Griffin, M.S., Ecology & Evolution, 2014-2015

## PROFESSIONAL SERVICE

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### *National and International*

- 2021-present Scientific Advisory Panel, BiodivERsA project *Eastern Tropical Pacific reef fish on the move: Biodiversity reorganisation and societal consequences*
- 2020-2023 Member, Mercer Award Subcommittee, Ecological Society of America
- 2019-present Contributing Member of F1000 Prime Faculty, Theoretical Ecology Section
- 2018-present Subject Editor, *Ecography* (Nordic Society Oikos)
- 2021 External Ph.D. thesis examiner, University of Queensland, Australia
- 2020 Guest editor for *Proceedings of the National Academy of Sciences*
- 2019 External Ph.D. thesis examiner, Technical University of Denmark, Denmark
- 2019 External Ph.D. thesis examiner, University of Queensland, Australia
- 2016 National Science Foundation review panel
- 2015 Top Reviewer for *Molecular Ecology*
- 2014 National Science Foundation review panel
- 2014 Organizer, “Climate and beyond: cumulative impacts on species range shifts.” Symposium at the Ecological Society of America meeting, Sacramento, CA.
- 2013 Co-Instructor, Workshop on Building Personal and Collective Leadership Capacity in Conservation, International Congress on Conservation Biology, Baltimore, MD
- 2013 Co-organizer, “Climate-ready management of living marine resources,” National Adaptation Forum, Denver, CO
- 2012 Co-organizer, “Climate and Fisheries: Responses of a Socio-Ecological System to Global Change,” American Fisheries Society annual meeting, St. Paul, MN
- 2011 Integrative Leadership Task Force, Society for Conservation Biology
- 2008-2010 Co-founder & Senior Articles Editor, Stanford Journal of Law, Science, and Policy

### *Research or training networks and working groups*

- 2020-present Member, Group on Earth Observations Biodiversity Observation Network (GEO BON) Genetic Composition Working Group
- 2020-present Member, Group on Earth Observations Biodiversity Observation Network (GEO BON) Species Populations Working Group
- 2018-present Member, Research Coordination Network (RCN) for Evolution in Changing Seas
- 2016-present Principal Investigator, Nereus Program for Predicting Future Oceans, an interdisciplinary and global network of researchers studying the human-ocean system
- 2020 Expert Group Member, “Gap Analysis of U.S. marine biodiversity protection: Scoping a framework for marine stewardship,” led by Emmett Duffy and Daniel Dunn
- 2019 Openscapes Champion (inaugural cohort), a training and professional network to foster open practices in environmental science
- 2018 Fisheries Innovation Scotland workshop on Global synthesis of climate impacts on fish distributions and growth and implications for Scottish fisheries, Aberdeen, Scotland
- 2017 Ocean Change and People: A COMPASS Communication and Policy Workshop, Warrenton, VA
- 2013 Visioning Workshop for an Institute for Sustainable Earth and Environmental Software (ISEES), NCEAS, Santa Barbara, CA

### *University*

- 2020-present Founding Chair, Committee on Diversity, Equity, and Inclusion, Graduate Program in Ecology & Evolution, Rutgers University

- 2020-present Director, Graduate Program in Ecology & Evolution, Rutgers University
- 2017-present Rutgers Dive Control Board for Scientific Diving, one of two Organizational Member Representatives from Rutgers to the American Academy of Underwater Sciences (AAUS)
- 2021 School of Graduate Studies Strategic Planning Committee for Diversity and Inclusion
- 2019 Top 50 Rutgers experts cited in the news media
- 2018-2019 Undergraduate Program Committee, Department of Ecology, Evolution, and Natural Resources, Rutgers University
- 2018 Organizing committee, Rutgers Climate Symposium on “Climate Change and Food Security,” Rutgers Climate Institute
- 2017-2018 Organizer, COMPASS Science Communications Workshop, Rutgers University
- 2014-2018 Executive Committee, Ecology & Evolution Graduate Program, Rutgers University
- 2014-2018 Chair, Seminar Committee, Ecology and Evolution Graduate Program, Rutgers University
- 2018 Top 50 Rutgers experts cited in the news media
- 2017 Search Committee, Vice Chancellor for Research & Innovation, Rutgers University
- 2017 Search Committee, Marine Social Science Assistant Professor, Department of Human Ecology, Rutgers University
- 2016 Organizing committee, Rutgers Climate Symposium on “Climate Change, Ecology and Health,” Rutgers Climate Institute
- 2014 Science & Vision Committee, Institute of Earth, Ocean, and Atmosphere, Rutgers University

### ***Outreach, Policy, and Management***

- 2019-present Member, Distribution Mapping and Analysis Project (DisMAP) Working Group, NOAA Fisheries
- 2018-present Science Advisor, Oceana (international marine conservation non-profit)
- 2016-present Advisor, Chewonki Foundation (environmental education non-profit)
- 2014-present Developed and maintain OceanAdapt (<http://oceanadapt.rutgers.edu>), a website that provides open data and visualizations of past and future marine species distribution shifts. Used by the US Environmental Protection Agency and the US Global Change Research Program as a climate change indicator.
- 2019 Participant, Climate and Fisheries Greater Atlantic Science Workshop, organized by the Natural Resources Defense Council
- 2017 Participant, Adaptation Challenge Workshop, Coral Reef Alliance (CORAL)
- 2017 Participant, Changing Ocean Conditions Related to Fisheries Workshop, Mid-Atlantic Regional Ocean Council (MARCO)
- 2017 Interviewee for “Fisheries, Aquaculture and Climate Change: A New Jersey Perspective,” an educational video produced by the Rutgers Climate Institute: <https://climatechange.rutgers.edu/196-videos-for-module/734-fisheries-aquaculture-and-climate-change-a-new-jersey-perspective>
- 2017 Interviewee for “Tools of Science: Modeling,” an educational video produced by Bidle K.D., K. Thamatrakoln, J. McDonnell, J. Kurz, and C. Metzler, Rutgers University: <https://www.youtube.com/watch?v=RK9m4OmFAbY>
- 2016 New England legislators’ briefing on ocean change and fisheries, organized by COMPASS
- 2016 Capitol Hill Briefing on ocean change and fisheries, Washington, DC, organized by COMPASS
- 2016 Roundtable Speaker, Science and Policy for a Changing Ocean, Washington, DC, organized by COMPASS
- 2016 Interviewee for “Climate Change and the Jersey Shore: Impacts on Coastal Communities, Ecosystems and Economies,” an educational video produced by the New Jersey Climate Adaptation Alliance: <https://njadapt.rutgers.edu/resources/videos/climate-change-and-the-jersey-shore-impacts-on-coastal-communities-ecosystems-and-economies>

- 2015-2016 Collaborated with U.S. Environmental Protection Agency (EPA) to develop “Marine Species Distribution” climate change indicator: <https://www.epa.gov/climate-indicators/climate-change-indicators-marine-species-distribution>
- 2015-2016 South Atlantic Climate Variability and Fisheries Ecosystem Plan II Section Writing Team, South Atlantic Fisheries Management Council
- 2014-2016 Northeast Regional Planning Body (RPB) Fish Work Group member
- 2014 Volunteer scientist, STEM Educators’ Series, Institute of Marine and Coastal Sciences, Rutgers University
- 2013 Capitol Hill Briefing on ocean change and fisheries, Washington, DC, organized by the American Fisheries Society
- 2013 Panelist, "Bridging the Climate Divide: Informing The Response to Hurricane Sandy and Implications for Future Vulnerability." Rutgers Climate Institute.
- 2011-2012 National Climate Assessment, Ecosystem Services Technical Input Team

### **Peer Review**

Journals: *Science, Nature, Proceedings of the National Academy of Sciences, Current Biology, eLife, Ecology Letters, Molecular Ecology, The American Naturalist, Ecology, Evolution, Methods in Ecology and Evolution, Science Advances, Ecological Applications, Heredity, Conservation Biology, Biological Conservation, Journal of Biogeography, Oceanography, Journal of Marine Biology, PLOS ONE, Fish and Fisheries, Marine Ecology Progress Series, ICES Journal of Marine Science, Progress in Oceanography, Oceanography, Regional Environmental Change, Marine Policy*

Funding Programs: *National Science Foundation, Society for the Study of Evolution (SSE), German Centre for Integrative Biodiversity Research (iDiv)Halle-Jena-Leipzig, David H. Smith Conservation Fellowship Program, Coral Reef Alliance, Stew Tweed Fisheries & Aquaculture Scholarship Fund, National Sea Grant, The David and Lucile Packard Foundation*

Books: *Princeton University Press*

Conferences and Reports: *International Marine Conservation Congress, California Ocean Science Trust, Center for American Progress*