## Marissa L. Baskett

Contact Information Department of Environmental Science and Policy

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Website: http://www.des.ucdavis.edu/faculty/baskett

Research Interests My research investigates ecological and rapid evolutionary responses to global environmental change through the development of dynamical models. In the process, I explore basic science topics ranging from resilience theory to adaptive capacity as well as applied science questions concerning the relative efficacy of alternative management approaches, primarily in marine systems.

EDUCATION

Princeton University, Princeton, New Jersey USA

Ph.D., Ecology and Evolutionary Biology, September 2006 M.A., Ecology and Evolutionary Biology, November 2003

Dissertation Topic: Marine Reserve Design and Life History Variation (Advisor: Simon A. Levin)

Stanford University, Stanford, California USA

B.S., Biological Sciences (minor: Mathematics) with Distinction, June 2001

Honors Thesis: A Polygenic Model of Genomic Imprinting Evolution (Advisor: Marcus W. Feldman)

Professional EXPERIENCE

University of California, Davis

Professor, Department of Environmental Science and Policy 2019-present Vice Chair, Department of Environmental Science and Policy 2019-present Associate Director of Research Initiatives, Coastal and Marine Sciences Institute 2018-present 2014-2019 Associate Professor, Department of Environmental Science and Policy

University of California, Santa Barbara

Postdoctoral Associate, National Center for Ecological Analysis and Synthesis 2006-2008

2008-2014

Teaching EXPERIENCE Environmental Science and Policy, University of California, Davis

Assistant Professor, Department of Environmental Science and Policy

Instructor, Population Ecology 2010-present Co-instructor, Environmental Analysis 2009-2014

Graduate Group in Ecology, University of California, Davis

Instructor, Conservation Ecology 2015 (co-instructor), 2017-present (instructor) Co-instructor, Computational Methods in Population Biology Taught biannually, 2010-present 2010, 2013 Instructor, Group study: Grant writing Instructor, Topics in Ecology and Evolution 2008-2011

Advising EXPERIENCE University of California, Davis

Lead Faculty Advisor, Environmental Science & Management (ESM) major 2016-present 2016-2020 Advisor for the Marine Ecology Area of Emphasis, Graduate Group in Ecology Track Advisor, Ecology Biodiversity & Conservation Track, ESM 2014-2015

**PUBLICATIONS** 

Backus, G.A., C.F. Clements, and M.L. Baskett. In press. Restoring local climate refugia to enhance the capacity for dispersal-limited species to track climate change. Ecology.

Golden, A., M.L. Baskett, D. Holland, A. Levine, K. Mills, and T. Essington. In press. Climate adaptation depends on rebalancing flexibility and rigidity in U.S. fisheries management. ICES Journal of Marine Science.

Ng, G., M.L. Baskett, and B. Gaylord. In press. Quantifying the effects of sensory stress on trophic cascades. *Theoretical Ecology*.

Peniston, J., G. Backus, M.L. Baskett, R. Fletcher, and R. Holt. 2024. Ecological and evolutionary consequences of temporal variation in dispersal. *Ecography* 2024(2):e06699.

Arroyo-Esquivel, J., A. Hastings, and M.L. Baskett. 2023. Local interactions affect spread of resource in a consumer-resource system with group defense. *Theoretical Ecology* 16:303314.

Karatayev, V.A., M.L. Baskett, and E.H. van Nes. 2023. The potential for alternative stable states in food webs depends on feedback mechanism and trait diversity. *American Naturalist* 202(3):725421.

Holcomb, K., C. Nguyen, N. Komar, B.D. Foy, N.A. Panella, **M.L. Baskett**, and C.M. Barker. 2023. Predicted reduction in transmission from deployment of ivermectin-treated birdfeeders for local control of West Nile virus. *Epidemics* 44:100697.

Arroyo-Esquivel, J., M.L. Baskett, M. McPherson, A. Hastings. 2023. How far to build it before they come? Analyzing the use of the Field of Dreams hypothesis in bull kelp restoration. *Ecological Applications* 33:e2850.

Arroyo-Esquivel, J., A. Hastings, and M.L. Baskett. 2022. Characterizing long transients in consumer-resource systems with group defense and discrete reproductive pulses. *Bulletin of Mathematical Biology* 84:102.

Backus, G.A., Y. Huang, and M.L. Baskett. 2022. Comparing management strategies for conserving communities of climate-threatened species with a stochastic metacommunity model. *Philosophical Transactions B* 377:20210380.

Backus, G.A. and M.L. Baskett. 2021. Identifying robust strategies for assisted migration given risks and uncertainties in a stochastic metacommunity. *Conservation Biology* 35(6):1809-1820.

Karatayev, V.A., M.L. Baskett, D.J. Kushner, N.T. Shears, J.E. Caselle, and C. Boettiger. 2021. Grazer behavior can regulate large-scale patterning of community states. *Ecology Letters* 24(9):1917-1929.

Dunn, R., J. Samhouri, and M.L. Baskett. 2021. Incorporating community ecology into recovery planning for harvested species. *Ecological Applications* 31(6):e02367.

Logan, C.A., J.P. Dunne, J.S. Ryan, M.L. Baskett, and S.D. Donner. 2021. Quantifying global potential for coral evolutionary response to climate change. *Nature Climate Change* 11(6):537-542.

White, E., M.L. Baskett, and A. Hastings. 2021. Catastrophes, connectivity, and Allee effects in the design of marine reserve networks. *Oikos* 130(3): 366-376.

Perkins, N.R., M. Prall, A. Chakraborty, J.W. White, **M.L. Baskett**, S.J. Morgan. 2021. Quantifying the statistical power of monitoring programs for marine protected areas. *Ecological Applications* 31(1):e02215.

Gil, M.A., **M.L. Baskett**, S.B. Munch, and A.M. Hein. 2020. Fast behavioral feedbacks make ecosystem sensitive to pace and not just magnitude of environmental change. *Proceedings of the National Academies of Science* 117(41): 25580-25589.

Oke, K.B., C.J. Cunningham, P.A.H. Westley, M.L. Baskett, S.M. Carlson, J. Clark, A.P. Hendry, V.A. Karatayev, N.W. Kendall, J. Kibele, H.K. Kindsvater, K.M. Kobayashi, B. Lewis, S. Munch, J.D. Reynolds, G.K. Vick, and E.P. Palkovacs. 2020. Consistency, causes, and consequences of body size declines in Pacific salmon. *Nature Communications* 11:4155.

Fernandez-Chacon, A., D. Villegas Ríos, E. Moland, **M.L. Baskett**, E.M. Olsen, and S.M. Carlson. 2020. Protected areas buffer against harvest selection and rebuild phenotypic complexity. *Ecological Applications* 30(5):e02108.

Springborn, M.R., A. Faig, A. Dedrick, and M.L. Baskett. 2020. Beyond biomass: valuing genetic diversity in natural resource management. *American Journal of Agricultural Economics* 102(2):607-

- Karatayev, V.A. and M.L. Baskett. 2020. At what spatial scales are alternative stable states relevant in demographically open ecosystems? *Ecology* 101(2): e02930.
- Castorani, M.C.N. and M.L. Baskett. 2020. Disturbance size and frequency mediate the coexistence of benthic spatial competitors. Ecology 101(1):e02904.
- Madin, J.S., A.H. Baird, M.L. Baskett, S.R. Connolly, and M.A. Dornelas. 2020. Partitioning colony size variation into growth and partial mortality. *Biology Letters* 16(1):20190727.
- Gil, M.A., **M.L. Baskett**, and S.J. Schreiber. 2019. Social information drives ecological outcomes among competing species. *Ecology* 100(11):e02835.
- Nickols, K.J., J.W. White, D. Malone, M.H. Carr, R.M. Starr, **M.L. Baskett**, A. Hastings, and L.W. Botsford. 2019. Setting expectations for adaptive management of marine protected areas. *Journal of Applied Ecology* 56(10):2376-2385.
- Yang, L., M.L. Baskett, and R.S. Waples. 2019. Life history and temporal variability of escape events interactively determine the fitness consequences of aquaculture escapees on wild populations. *Theoretical Population Biology* 129:93-102.
- S. Xia, M.L. Baskett, and J.R. Powell. 2019. Quantifying the efficacy of genetic shifting in control of mosquito-borne diseases. *Evolutionary Applications* 12(8):1552-1568.
- Kaplan, K.A., L. Yamane, L.W. Botsford, M.L. Baskett, A. Hastings, S. Worden, J.W. White. 2019. Setting expected timelines of fished population recovery for the adaptive management of a marine protected area network. *Ecological Applications* 29(6):e01949.
- Ashander, J., L.C. Thompson, J.N. Sanchirico, and M.L. Baskett. 2019. Optimal investment to enable evolutionary rescue. *Theoretical Ecology* 12(2): 165-177.
- Baker-Medard, M., T.F. Allnutt, M.L. Baskett, R.A. Watson, E. Lagabrielle, and C. Kremen. 2019. Rethinking Spatial Costs and Benefits of Fisheries in Marine Conservation. *Ocean and Coastal Management* 178:104824.
- Essington, T.E., J.N. Sanchirico, and M.L. Baskett. 2018. Economic value of ecological information in ecosystem-based natural resource management depends on exploitation history. *Proceedings of the National Academy of Science* 115(7):1658-1663.
- Gil, M.A., A.M. Hein, O. Spiegel, M.L. Baskett, and A. Sih. 2018. Social information can link individual behavior to ecological dynamics. *Trends in Ecology and Evolution* 33(7):535-548.
- Dedrick, A.G. and **M.L. Baskett**. 2018. Integrating genetic and demographic effects of connectivity on population stability: the case of hatchery trucking in salmon. *American Naturalist* 192(2):E62-E80.
- Dunn, R.P., **M.L. Baskett**, and K.A. Hovel. 2017. Interactive effects of predator and prey harvest on ecological resilience of rocky reefs. *Ecological Applications* 27(6):1718-1730.
- Aalto, E.A. and M.L. Baskett. 2017. Post-harvest recovery dynamics depend on predator specialization in size-selective fisheries. *Marine Ecology Progress Series* 564:127-143.
- White, J.W., K.J. Nickols, D. Malone, M.H. Carr, R.M. Starr, F. Cordoleani, M.L. Baskett, A. Hastings, L.W. Botsford. 2016. Models for adaptive management: Methods for fitting state-space integral projection models to time series data. *Ecological Applications* 26(8):2677-2694.
- Ashander, J., L.-M. Chevin, and M.L. Baskett. 2016. Predicting rescue via evolving plasticity in stochastic environments. *Proceedings of the Royal Society B* 283:20161690.
- Burgess, S.C., M.L. Baskett, R.K. Grosberg, S.G. Morgan, and R.R. Strathmann. 2016. Is dispersal always for dispersal? *Biological Reviews* 91(3): 867-882.
- Takashina, N. and M.L. Baskett. 2016. Determining the appropriate spatial scale of fishery

management. Journal of Theoretical Biology 390:14-22.

Barnett, L.A.K. and **M.L. Baskett**. 2015. Marine reserves can enhance ecological resilience. *Ecology Letters* 18(12):1301-1310.

**Baskett, M.L.** and L.A.K. Barnett. 2015. The ecological and evolutionary consequences of marine reserves. *Annual Review of Ecology, Evolution, and Systematics* 46:49-73.

Fabina, N.S., M.L. Baskett, and K. Gross. 2015. The differential effects of increasing frequency and magnitude of extreme events on coral populations. *Ecological Applications* 25(6):1534-1545.

Essington, T.E., **M.L. Baskett**, J.N. Sanchirico, and C. Walters. 2015. A novel model of predator prey interactions reveals the sensitivity of forage fish - piscivore fishery trade-offs to ecological conditions. *ICES Journal of Marine Science* 72(5):1349-1358.

Barnett, L.A.K., **M.L. Baskett**, L.W. Botsford. 2015. Quantifying the potential for marine reserves or harvest reductions to buffer temporal mismatches caused by climate change. *Canadian Journal of Fisheries and Aquatic Sciences* 72(3):376-389.

Edmunds, P.J., S.C. Burgess, H.M. Putnam, **M.L. Baskett**, L. Bramanti, N.S. Fabina, X. Han, M.P. Lesser, J.S. Madin, C.B. Wall, D.M. Yost, R.D. Gates. 2014. Evaluating the causal basis of ecological success within the Scleractinia: an Integral Projection Model approach. *Marine Biology* 161(12):2719-2734.

**Baskett, M.L.**, N.S. Fabina, and K. Gross. 2014. Response diversity can increase ecological resilience to disturbance in coral reefs. *American Naturalist* 184(2):E16-E31.

Edmunds, P.J., M. Adjeroud, M.L. Baskett, I. Baums, A.F. Budd, R.C. Carpenter, N. Fabina, T-Y. Fan, E.C. Franklin, K. Gross, X. Han, L. Jacobson, J.S. Klaus, T.R. McClanahan, J.K. O'Leary, M.J.H. van Oppen, X. Pochon, H.M. Putnam, T.B. Smith, M. Stat, H. Sweatman, R. van Woesik, and R.D. Gates. 2014. Persistence and change in community composition of reef corals through present, past and future climates. *PLoS ONE* 9(10):e107525.

Castorani, M.C.N., K.A. Hovel, S.L. Williams, and M.L. Baskett. 2014. Disturbance facilitates the coexistence of antagonistic ecosystem engineers in California estuaries. *Ecology* 95(8):2277-2288.

Baskett, M.L., S.C. Burgess, and R.S. Waples. 2013. Assessing strategies to minimize unintended fitness consequences of aquaculture on wild populations. *Evolutionary Applications* 6(7):1090-1108.

Burgess, S.C., R.S. Waples, and M.L. Baskett. 2013. Local adaptation when competition depends on phenotypic similarity. *Evolution* 67(10):3012-3022.

Perkins, T.A., B.L. Phillips, M.L. Baskett, and A. Hastings. 2013. Evolution of dispersal and life history interact to drive accelerating spread of an invasive species. *Ecology Letters* 16:1079-1087.

Aalto, E.A. and M.L. Baskett. 2013. Quantifying the balance between bycatch and predator or competitor release for non-target species. *Ecological Applications* 23(5):972-983.

**Baskett, M.L.** and R.S. Waples. 2013. Evaluating alternative strategies for minimizing unintended fitness consequences of cultured individuals on wild population. *Conservation Biology* 27(1):83-94.

White, J.W., L.W. Botsford, A. Hastings, M.L. Baskett, D.M. Kaplan, and L.A.K. Barnett. 2013. Transient responses of fished populations to marine reserve establishment. *Conservation Letters* 6(3):180-191.

**Baskett, M.L.** 2012. Evolution of Dispersal. In: *Encyclopedia of Theoretical Ecology* (A. Hastings and L. Gross, eds.), University of California Press, Berkeley, CA, pp. 192-198.

**Baskett**, M.L. 2012. Integrating mechanistic organism-environment interactions into the basic theory of community and evolutionary ecology. *Journal of Experimental Biology* 215:948-961.

**Baskett, M.L.** and R. Gomulkiewicz. 2011. Introgressive hybridization as a mechanism for species rescue. *Theoretical Ecology* 4:223-239.

White, J.W., L.W. Botsford, M.L. Baskett, L.A.K. Barnett, R.J. Barr, and A. Hastings. 2011. Linking models and monitoring data in assessing performance of no-take marine reserves. *Frontiers* 

in Ecology and the Environment 9:(7)390-399.

**Baskett, M.L.** and A.K. Salomon. 2010. Recruitment facilitation can drive alternative states on temperate reefs. *Ecology* 91(6):1763-1773.

J.L. Orrock, M.L. Baskett, and R.D. Holt. 2010. Spatial interplay of plant competition and consumer foraging mediates plant coexistence and drives the invasion ratchet. *Proceedings of the Royal Society B: Biological Sciences* 277:3307-3315.

J.L. Orrock, R.D. Holt, and M.L. Baskett. 2010. Refuge-mediated apparent competition in plant-consumer interactions. *Ecology Letters* 13:11-20.

**Baskett, M.L.**, R.M. Nisbet, C.V. Kappel, P.J. Mumby, and S.D. Gaines. 2010. Conservation management approaches to protecting the capacity for corals to respond to climate change: a theoretical comparison. *Global Change Biology* 16(4):1229-1246.

**Baskett, M.L.**, S.D. Gaines, and R.M. Nisbet. 2009. Symbiont diversity may help coral reefs survive moderate climate change. *Ecological Applications* 19(1):3-17.

Pelc, R.A., M.L. Baskett, T. Tranci, S.D. Gaines, and R.R. Warner. 2009. Quantifying larval export from South African marine reserves. *Marine Ecology Progress Series* 394:65-78.

Dunlop, E.S., **M.L. Baskett**, M. Heino, and U. Dieckmann. 2009. The propensity of marine reserves to reduce the evolutionary effects of fishing in a migratory species. *Evolutionary Applications* 2:371-393.

**Baskett, M.L.** and B.S. Halpern. 2009. Marine Ecosystem Services. In: *Guide to Ecology* (S.A. Levin, ed.), Princeton University Press, Princeton, NJ, pp. 619-624.

**Baskett, M.L.**, J.S. Weitz, and S.A. Levin. 2007. The evolution of dispersal in reserve networks. *American Naturalist* 170(1):59-78.

**Baskett, M.L.**, F. Micheli, and S.A. Levin. 2007. Designing marine reserves for interacting species: Insights from theory. *Biological Conservation* 137(2):163-179.

**Baskett, M.L.** 2007. Simple fisheries and marine reserve models of interacting species: an overview and example with facilitation. *CalCOFI Reports* 48:71-81.

**Baskett, M.L.** 2006. Prey size refugia and trophic cascades in marine reserves. *Marine Ecology Progress Series* 328:285-293.

**Baskett, M.L.**, M. Yoklavich, and M.S. Love. 2006. Predation, competition, and the recovery of overexploited fish stocks in marine reserves. *Canadian Journal of Fisheries and Aquatic Sciences* 63(6):1214–1229.

**Baskett, M.L.**, S.A. Levin, S.D. Gaines, and J. Dushoff. 2005. Marine reserve design and the evolution of size at maturation in harvested fish. *Ecological Applications* 15(3):882–901.

Jin, L., **M.L. Baskett**, L.L. Cavalli-Sforza, L.A. Zhivotovsky, M.W. Feldman and N.A. Rosenberg. 2000. Microsatellite evolution in modern humans: a comparison of two data sets from the same populations. *Annals of Human Genetics* 64:117–134.

National Academies of Sciences, Engineering, and Medicine. 2019. A Decision Framework for Interventions to Increase the Persistence and Resilience of Coral Reefs. Washington, DC: The National Academies Press.

National Academies of Sciences, Engineering, and Medicine. 2018. A Research Review of Interventions to Increase the Persistence and Resilience of Coral Reefs. Washington, DC: The National Academies Press.

Ambrose, R., Raimondi, P., Anderson, S., **Baskett, M.**, Caselle, J., Carr, M., Edwards, C., Kent, M., Nickols, K., Ramanujam, E., Reyns, N., and Stier, A. (California Ocean Protection Council Science Advisory Team Working Group). 2018. Ocean Restoration Methods: Scientific Guidance

Reports

for Once-Through Cooling Mitigation Policy.

Simpson, M.C., Scott, D., New, M., Sim, R., Smith, D., Harrison, M., Eakin, C.M., Warrick, R., Strong, A.E., Kouwenhoven, P., Harrison, S., Wilson, M., Nelson, G.C., Donner, S., Kay, R., Geldhill, D.K., Liu, G., Morgan, J.A., Kleypas, J.A., Mumby, P.J., Palazzo, A., Christensen, T.R.L., Baskett, M.L., Skirving, W.J., Elrick, C., Taylor, M., Magalhaes, M., Bell, J., Burnett, J.B., Rutty, M.K., Overmas, M. and R. Robertson. 2009. An Overview of Modelling Climate Change Impacts in the Caribbean Region with contribution from the Pacific Islands.

Grants

M.L. Baskett, T. Scott, M. Springborn, C. Pomeroy, S. Craig, M. Carr, L. Richmond, J. Largier, and B. Gaylord. DISES: Between maintenance and transformation: an SES framework for restoration decision-making under climate change.

National Science Foundation, \$1,599,937

07/12/2021-06/30/2026

B. Gaylord, B. Hodin, M. Zippay, S. Place, M. Edwards, **M.L. Baskett**, and J. Hodin. A multipronged approach to kelp recovery along California's north coast.

California SeaGrant, \$326,274.95

7/1/20-6/30/22

J. Sanchirico, A. Hastings, **M.L. Baskett**, N. Fangue, and L. Botsford. NSF Research Traineeship: Sustainable Oceans: From Policy to Science to Decisions.

National Science Foundation, \$2,999,884

9/1/17-8/31/22

M.L. Baskett. A framework for species conservation by managed relocation: quantifying risks, uncertainties, and alternatives.

National Science Foundation, \$422,971

4/15/17-3/31/21

S. Carlson, M. Springborn, M.L. Baskett, W. Satterthwaite, S. Lindley, and R. Waples. Managing Natural Resources for Adaptive Capacity: the Central Valley Chinook Salmon Portfolio.

CALFED Ecosystem Restoration Grant, \$489,343

8/1/14-7/31/17

M.L. Baskett. Adaptation and dispersal in variable environments.

Hellman Fellowship, \$25,000

7/1/12-6/30/13

M.L. Baskett. The interaction between spatially and temporally heterogeneous selection: Salmon as a model system.

National Science Foundation, \$132,691

8/1/09-12/31/12

L. Botsford, M.L. Baskett and A. Hastings. Adaptive Management: Predicting Responses to Marine Protected Areas for Comparison to Monitoring Data.

California Sea Grant, \$226,374

3/1/10-1/31/14

2013-2014

Honors and Awards University of California, Davis Eleanor and Harry Walker Academic Advising Award
University of California, Davis Chancellor's Fellow

Ecological Society of America Early Career Fellow

2013-2018

Professional Service co-Chair, California Kelp Restoration and Management Plan

Vice-chair, Ecological Society of America Theoretical Ecology section

Science Advisory Committee 2023-present Member, Australian Reef Restoration and Adaptation Program 2023-present Intervention Risk Review Group Member, Ocean Protection Council Science Advisory Team 2019-present Editorial Board member, Ecological Applications 2017-present Participant, Recovery Planning workshop 2021 for the 15 Indo-Pacific corals listed under the Endangered Species Act Member, National Academies of Science Committee 2018-2019 on Interventions to Increase the Resilience of Coral Reefs Member, Ocean Protection Council Science Advisory Team 2018 on the Once Through Cooling Mitigation funding program Editorial Board member, Frontiers in Ecology and the Environment 2012-2016 Chair, Ecological Society of America Theoretical Ecology section 2014-2015

Member, Ecological Society of America Rapid Response Team

Steering Committee member, Comparative Analysis of Marine Ecosystem Organization

Joint NSF/NOAA funding program

2012-2015
2009-2011

CONTRIBUTIONS TO DIVERSITY, EQUITY, AND INCLUSION Dept. of Environmental Science & Policy DEI Committee

Member, 2023-present Founding chair, 2020-2023

- Helped to lower barriers for undergraduate participation in research through a Research Fair and development of an accessible positions website
- Helped to pilot a guest lecture program at community colleges to increase recruitment from diverse communities
- Co-led alumni seminar to build community and increase capacity for students to see themselves in environmental careers
- Regularly collated and distributed guidelines on best practices for DEI in the classroom to ESP faculty

Symposia organized Symposium co-organizer, Thresholds and Ecosystem Restoration, Davis, CA
Session co-chair, Species on the Move, Kruger National Park, South Africa
7/22/19-7/26/19
Symposium co-organizer, Managed Relocation Under a Changing Climate: An Interdisciplinary
Perspective, Davis, CA
12/4/17
Symposium co-organizer, California Salmon and Climate Variability, Davis, CA
9/10/15

## INVITED PRESENTATIONS

- 2022 NOAA Northwest Fishery Science Center Monster Jam, Seattle, WA (remote)
- 2021 NOAA Coral Collaboration Series, Charleston, SC (remote)
- 2020 Estuarine Connectivity Symposium, Davis, CA
- 2019 Southeast Florida Coral Reef Initiative Technical Advisory Committee meeting, Dania Beach, FL
- 2018 Midwest Mathematical Biology Conference, La Crosse, WI
- University of the Pacific Geological and Environmental Sciences seminar series, Stockton, CA
- 2017 Society for Mathematical Biology Annual Meeting, Salt Lake City, UT San Diego State University Biology seminar series, San Diego, CA
- 2016 School of Aquatic and Fisheries Sciences departmental seminar series, University of Washington School of Aquatic and Fishery Sciences Quantitative Seminar, University of Washington EBio Departmental Colloquium, University of Colorado, Boulder
- 2015 Wildlife, Fisheries & Conservation seminar series, University of California, Berkeley Monash University School of Biological Sciences seminar series, Melbourne, Australia University of Melbourne School of BioSciences seminar series, Melbourne, Australia International Stock Enhancement and Sea Ranching Symposium, Sydney, Australia Biology Department Seminar Series, California State University, Chico Morrison Institute Winter Colloquium, Stanford University, Stanford, CA
- 2014 Marine Science Center, Northeastern University, Nahant, MA
- 2013 Workshop on Rapid Evolution and Sustainability, Mathematical Biosciences Institute, Columbus, OH
- 2012 Romberg Tiburon Center, San Francisco State University, San Francisco, CA Workshop on Spatial Models of Micro and Macro Systems, Mathematical Biosciences Institute, Columbus, OH
- 2011 Institute of Biodiversity, Animal Health & Comparative Medicine, University of Glasgow, Glasgow, UK
  - The Journal of Experimental Biology 2011 Symposium: Integrating Biomechanics and Ecology, Cambridge, UK
- 2010 Wildlife Seminar Series, University of California, Berkeley Hopkins Marine Station seminar series, Stanford University, Monterey, CA
- 2009 Western Society of Naturalists Annual Meeting, Seaside, CA Aquatic Ecology Seminar Series, University of California, Berkeley International Temperate Reef Symposium, Adelaide, Australia
- 2008 International Symposium on the Effects of Climate Change on the World's Oceans, Gijon, Spain Ecology and Evolutionary Biology, Brown University, Providence, RI Bodega Marine Laboratory, University of California, Davis
- 2006 College of Agricultural and Environmental Sciences, University of California, Davis California Cooperative Oceanic Fisheries Investigations Annual Conference, Pacific Grove, CA Section of Evolution and Ecology, University of California, Davis
- 2004 Ecological and Environmental Economics workshop on Spatial Aspects of Reserve Design Optimization under Economic Constraints, Abdus Salam International Centre for Theoretical Physics, Trieste, Italy