Joshua K. Abbott

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Education

2002-2007 Department of Agricultural and Resource Economics, University of California, Davis.

Ph.D., Agricultural and Resource Economics, March 2007.
Dissertation: Spatial and Strategic Aspects of Fisheries Bycatch.
Supervisor: James E. Wilen.

2000-2002 Department of Economics, University of Washington, Seattle, WA.
M.A., Economics, June 2002.

2000-2002 Program on the Environment, University of Washington, Seattle, WA.
Graduate Certificate in Environmental Management, June 2002.

1997-2000 Hankamer School of Business, Baylor University, Waco, TX.
B.B.A. (*Summa cum Laude*), May 2000.

Awards & Fellowships

Publication of Enduring Significance in *Marine Resource Economics* 2026, for "Fisheries Production: Management Institutions, Spatial Choice, and the Quest for Policy Invariance." *Marine Resource Economics* 32(2) (2017): 143-168.

Julian Simon Research Fellowship 2022. Property and the Environment Research Center. Bozeman, MT.

Lone Mountain Research Fellowship 2019. Property and the Environment Research Center. Bozeman, MT.

Outstanding Article Award in *Marine Resource Economics* 2017, for "Fisheries Production: Management Institutions, Spatial Choice, and the Quest for Policy Invariance." *Marine Resource Economics* 32(2): 143-168.

Dr. S.Y. Hong Award for Outstanding Article in *Marine Resource Economics* 2010, for "Employment and Remuneration Effects of IFQs in the Bering Sea/Aleutian Islands Crab Fisheries." *Marine Resource Economics* 25(4) (2010): 333-354.

North American Association of Fisheries Economists and International Institute of Fisheries Economics and Trade, Best Student Paper Award 2009, for "Rent Dissipation and Efficient Rationalization in For-Hire Recreational Fishing."

Graduate Fellowship in Marine Resource Economics, National Sea Grant College and National Oceanic and Atmospheric Administration, 2004-2006.

Sea Grant Traineeship 2003-2004.

Professional Experience

3/24-present	Director, School of Sustainability, Arizona State University, Tempe, AZ.
7/23-2/24	Acting Director, School of Sustainability, Arizona State University, Tempe, AZ.
1/22-7/23	Deputy Director of Student Success, School of Sustainability, Arizona State University, Tempe, AZ.
8/20-present	Professor, School of Sustainability, Arizona State University, Tempe, AZ.
8/13-7/20	Associate Professor, School of Sustainability, Arizona State University, Tempe, AZ.
8/07-7/13	Assistant Professor, School of Sustainability, Arizona State University, Tempe, AZ.
3/07-7/07	Post Graduate Researcher, Department of Agricultural and Resource Economics, University of California, Davis.
7/03-2/07	Research Assistant, Department of Agricultural and Resource Economics, University of California, Davis.
9/02-6/03	Teaching Assistant, Department of Agricultural and Resource Economics, University of California, Davis.
9/01-6/02	Research Assistant, Department of Geography, University of Washington, Seattle, WA.

Research Activities

Publications involving students or post-docs are indicated with a ^{S}. Order of names is as published and does not necessarily indicate priority of authorship. Papers for which I am lead author or where lead authorship is equally shared between myself and one or more

authors are indicated by an *. *Bibliometrics (Google Scholar) as of 8/1/26:* Citations: 3656, h-index: 33, i-10 index: 49.

Peer-Reviewed Journal Articles

60. **J.K. Abbott,** E.P. Fenichel and S.D. Yun. "Risky (Natural) Assets: Stochasticity, Nonconvexity, and the Value of Natural Capital." *Journal of the Association of Environmental and Resource Economists.* 13(5) (2026): 1269-1309.

59. Liu, Y., M.D. Smith, **J.K. Abbott**, D. Dietz, D.C. Leaning, A. Smyth, and T. Yamashita. "The Global Seafood Trade, Embodied Nutrients, and Nutritional Affordability." *Nature Communications* 16 (2025): 5868.

58. Sakai, Y., D.H. Holland, and **J.K. Abbott**. "Ex-ante Diversification, Limited Entry Permit Portfolios, and Fishers' Participation Decisions." *Marine Resource Economics* 40(3) (2025): 171-193.

57. Holland, D.H., S. Kasperski, and **J.K. Abbott**. "Contract and Sustain: Evaluating the Results of Progressive Implementation of Limited Entry and Catch Shares in West Coast and Alaska Fisheries Over Four Decades" *Canadian Journal of Fisheries and Aquatic Sciences* 82 (2025): 1-16.

56. Treakle[S], T., **Abbott, J.K.,** and D.H. Holland. "Not by Fishing Alone: Non-Fishing Employment and Income for US West Coast Fishers." *Ocean and Coastal Management.* 243 (2023): 106763

55. DesRoches, C.T., D. Fischer, J. Silver, P. Arthur[S], R. Livernois, T. Crichlow[S], G. Hersch, M. Nagatsu, and **J. K. Abbott**. "When is Green Nudging Ethically Permissible?" *Current Opinion in Environmental Sustainability.* 60 (2023): 101236.

54. Jungers[S], B., **J.K. Abbott**, P. Lloyd-Smith, W. Adamowicz, and D. Willard. "`A la carte' management of recreational resources: Evidence from the US Gulf of Mexico." *Land Economics.* 99(2) (2023): 161-181.

53. **Abbott*, J.K.,** Y. Sakai, and D.H. Holland. "Species, space, and time: a quarter-century of fishers' diversification strategies on the US West Coast." *Fish and Fisheries.* 24(1) (2023): 93-110.

52. Salau[S], K., D. Shanafelt, J. Baggio, E.P. Fenichel, **J.K. Abbott**, and M. Janssen. "Taking a Moment to Measure Networks – An Approach to Species Conservation." *Landscape Ecology* 37 (2022): 2551-2569.

51. Kunkel[S], L.C., Breetz, H.L., and **J.K. Abbott.** "Adoption of 100% Renewable Energy Commitments in US Cities: The Role of Institutions and Prior Sustainability Actions." *Energy Policy* 167 (2022): 113053.

50. Norman, K., D.H. Holland, **J.K. Abbott**, and A. Phillips. "Community-level fishery measures and individual fishers: comparing primary and secondary data for the U.S. West Coast." *Ocean and Coastal Management* 224 (2022): 106191.

49. Reimer, M.N., **J.K. Abbott,** and A. Haynie. "Structural Behavioral Models for Rights-Based Fisheries." *Resource and Energy Economics* 68 (2022): 101294.

48. **J.K. Abbott*,** B. Leonard, and B. Garber-Yonts. "The Distributional Outcomes of Rights-Based Management in Fisheries." *Proceedings of the National Academy of Sciences* 119(2) (2022): e2109154119.

47. Shin[S], H.C., Vallury, S., D.J. Yu, J.M. Anderies, and **J.K. Abbott**. "Understanding the role of institutional diversity on irrigation system dynamics." *Ecological Economics* 191 (2022): 107221.

46. **Abbott*, J.K.,** Lew, D.K., Whitehead, J.C., and R.T. Woodward. "The Future of Fishing for Fun: The Economics and Sustainable Management of Recreational Fisheries." *Review of Environmental Economics and Policy* 16(2) (2022): 262-281.

45. Hashemi[S], S.M., A. Kinzig, H. Eakin, R. Sedaghat, and **J.K. Abbott**,. "Developing a socio-psychological model explaining farmers' income diversification in response to groundwater scarcity in Iran." *International Journal of Water Resources Development* 38(2) (2022): 283-305.

44. **Abbott*, J.K.,** D. Willard, and J. Xu. "Feeding the Dragon: The Evolution of China's Fishery Imports." *Marine Policy* 133 (2021): 104733.

43. Brelsford[S], Christa, **J.K. Abbott**. "How Smart are Water Smart Landscapes?" *Journal of Environmental Economics and Management.* 106 (2021): 102402 (IF 4.175)

42. Hunt, Len, D.J. Phaneuf, **J.K. Abbott**, E.P. Fenichel, J.A. Rodgers, J.D. Buckley, D. A.R. Drake, and T.B. Johnson. "The Influence of Human Population Change and Aquatic Invasive Species Establishment on Future Recreational Fishing Activities to the Canadian Portion of the Laurentian Great Lakes." *Canadian Journal of Fisheries and Aquatic Science.* 78 (2021): 232-244 (IF 2.470)

41. Vallury[S], S., **J.K. Abbott,** H.C. Shin, and J.M. Anderies. "Sustaining Coupled Irrigation Infrastructures: Multiple Instruments for Multiple Dilemmas." *Ecological Economics.* 178 (2020): 106793. (IF 3.895)

40. Hunt, L., D. Phaneuf, **J.K. Abbott**, and E.P. Fenichel. "Per-Tip Changes to the Economic Value of Ontario, Canada Anglers Fishing the Laurentian Great Lakes under Target Species Transitions." *Human Dimensions of Wildlife* 26(2): 132-147. (IF 1.410)

39. Hashemi[S], S.M., A. Kinzig, H. Eakin, R. Sedaghat, and **J.K. Abbott**,. "Embedding Farmers' Groundwater Use in the Context of their Livelihoods: Farmers'

Perspectives on Social-Ecological Stressors, Causes, and Solutions." *International Journal of Sustainable Development and World Ecology* 28(5): 387-401. (IF 2.772)

38. Hashemi[S], S.M., A. Kinzig, **J.K. Abbott**, H. Eakin, and R. Sedaghat. "Exploring Farmers' Perceptions about their Depleting Groundwater Resources using Path Analysis: Implications for Groundwater Overdraft and Income Diversification." *Hydrogeology Journal* 28 (2020): 1975–1991. (IF 2.641)

37. Shin[S], H.C., D.J. Yu, S. Park, J.M. Anderies, **J.K. Abbott**, M. Janssen, and T.K. Ahn. "How do Resource Mobility and Group Size Affect Institutional Arrangements for Rule Enforcement? Empirical Hypotheses about Institutional Fit." *Ecological Economics* 174 (2020): 106657. (IF 3.895)

36. Lloyd-Smith, P., **J.K. Abbott**, W. Adamowicz, and D. Willard. "Intertemporal Substitution in Travel-Cost Models with Seasonal Time Constraints." *Land Economics* 96(3) (2020): 399-417. (IF 1.64)

35. Holland, D. H., **J.K. Abbott,** and K. Norman. "Fishing to Live or Living to Fish: Job Satisfaction and Identity of West Coast Fishermen." *Ambio* 49(2) (2020): 628-639. (IF 3.62)

34. Robert Arlinghaus, **J.K. Abbott***, E.P. Fenichel, S.R. Carpenter, L.M. Hunt, J. Alós, T. Klefoth, S.J. Cooke, R. Hilborn, O.P. Jensen, M.J. Wilberg, J.R. Post and M. Manfredo. "Opinion: Governing the recreational dimension of global fisheries." *Proceedings of the National Academy of Sciences* 116(12) (2019): 5209-5213. (IF 9.5)

33. **Abbott*, J.K.** and U.R. Sumaila. "Reducing Marine Plastic Pollution: Policy Insights from Economics." *Review of Environmental Economics and Policy* 13(2) (2019): 327–336. (IF 4.4)

32. Lloyd-Smith[S], P., **J.K. Abbott**, W. Adamowicz, and D. Willard. "Decoupling the Value of Leisure Time from Labor Market Returns in Travel Cost Models." *Journal of the Association of Environmental and Resource Economists* 6(2) (2019): 1-28. (IF 5.17)

31. **Abbott*, J.K.**, P. Lloyd-Smith[S], W. Adamowicz, and D. Willard. "Status-quo management of marine recreational fisheries undermines angler welfare." *Proceedings of the National Academy of Sciences* 115(36) (2018): 8948-8953. (IF 9.5)

30. Noziglia[S], A.J., **J.K. Abbott**, B. Polidoro and L.R. Gerber. "Flame Retardant Contamination and Seafood Sustainability." *Sustainability* 10(4) (2018): 1070. (IF 2.08)

29. **Abbott*, J.K.** and D. Willard. "Rights-Based Management for Recreational For-Hire Fisheries: Evidence from a Policy Trial." *Fisheries Research* 196 (2017): 106-116.

28. Yun [S], S.D., B. Hutniczak[S], **J.K. Abbott***, E.P. Fenichel. "Ecosystem Based Management and the Wealth of Ecosystems." *Proceedings of the National Academy of Sciences* 114(25) (2017): 6539-6544. (IF 9.5)

27. Klaiber, H.A., **J.K. Abbott***, and V.K. Smith. "Some Like it (Less) Hot: Extracting Tradeoff Measures for Physically Coupled Amenities." *Journal of the Association of Environmental and Resource Economists* 4(4) (2017): 1053-1079. (IF 5.17)

26. Huang[S], B., **J.K. Abbott**, E.P. Fenichel, L.R. Gerber, R. Muneepeerakul, and C. Perrings. "Thinking Beyond the Moratorium: Testing the Feasibility of a Hypothetical Whaling-Conservation Permit Market in Norway." *Conservation Biology* 31(4) (2017): 809-817. (IF 4.84)

25. Reimer[S], M., **J.K. Abbott,** and J.E. Wilen. "Revisiting the Fisheries Production Function: Space, Time, and Policy Invariance." *Marine Resource Economics* 32(2) (2017): 143-168. (IF 1.85)

24. Reimer[S], M., **J.K. Abbott,** and A. Haynie. "Empirical Models of the Fishery Production Process: Conflating Technology with Incentives?" *Marine Resource Economics* 32(2) (2017): 169-190. (IF 1.85)

23. Brelsford[S], C., **J.K. Abbott.** "Growing into Water Conservation? Decomposing the Drivers of Reduced Water Consumption in Las Vegas, NV." *Ecological Economics* 133 (2017): 99-110. (IF 3.90)

22. Fenichel, E.P., **J.K. Abbott,** J. Bayham, W. Boone, E.M.K. Haacker, and L. Pfeiffer. "Measuring the Value of Groundwater and other Forms of Natural Capital." *Proceedings of the National Academy of Sciences* 113(9) (2016): 2382-2387. (IF 9.5)

21. Fenichel, E.P., S.A. Levin, B. McCay, K. St. Martin, **J.K. Abbott**, and M.L. Pinsky "Wealth Reallocation and Sustainability Under Climate Change." *Nature Climate Change* 6(3) (2016): 237-244. (IF: 19.30)

20. **Abbott*, J.K.** "Fighting over a Red Herring: The Role of Economics in Recreational-Commercial Allocation Disputes." *Marine Resource Economics* 30(1) (2015): 1-20. (IF 1.85)

19. **Abbott*, J.K.**, A. Haynie, and M.N. Reimer. "Hidden Flexibility: Institutions, Incentives and the Margins of Selectivity in Fishing." *Land Economics* 91(1) (2015): 169-195. (IF 1.50)

18. Tang[S], X., P. Ohri-Vachaspati, **J.K. Abbott**, R. Aggarwal, D.L. Tulloch, K. Lloyd., and M. Yedida. "Associations between Food Environment around Schools and Professionally Measured Weight Status for Middle and High School Students." *Childhood Obesity* 10(6) (2014): 511-517. (IF 1.87)

17. Fenichel, E.P. and **J.K. Abbott***. "Natural Capital: From Metaphor to Measurement." *Journal of the Association of Environmental and Resource Economists* 1(1) (2014): 1-27. (IF 5.17)

16. Reimer[S], M.N., **J.K. Abbott**, and J.E. Wilen. "Unraveling the Multiple Margins of Rent Generation from Individual Transferable Quotas." *Land Economics* 90(3) (2014): 538-559. (IF 1.50)

15. **Abbott[*], J.K.**, J.L. Anderson, L. Campling, R. Hannesson, E. Havice, M.S. Lozier, M.D. Smith, and M.J. Wilberg. "Steering the Global Partnership for Oceans." *Marine Resource Economics* 29(1) (2014): 1-16. (IF 1.85)

14. Fenichel, E.P. and **J.K. Abbott[*]**. "Heterogeneity and the Fragility of the First Best: Putting the `Micro' in Bioeconomic Models of Recreational Resources." *Resource and Energy Economics* 36(2) (2014): 351-369. (IF 1.92)

13. **Abbott[*], J.K.** and E.P. Fenichel. "Anticipating Adaptation: An Economic Approach for Linking Policy and Stock Status to Recreational Angler Behavior." *Canadian Journal of Fisheries and Aquatic Sciences* 70(8) (2013): 1190-1208. (IF 2.63)

12. Fenichel, E.P., **J.K. Abbott[*]**, and B. Huang[S]. "Modelling Angler Behaviour as a Part of the Management System: Synthesizing a Multi-disciplinary Literature." *Fish and Fisheries* 14(2) (2013): 137-157. (IF 6.99)

11. **Abbott[*], J.K.** and H.A. Klaiber. "The Value of Water as an Urban Club Good: A Matching Approach to Community-Provided Lakes." *Journal of Environmental Economics and Management* 65(2) (2013): 208-224. (IF 2.64)

10. **Abbott[*], J.K.** and A. Haynie. "What are we Protecting? Fisher Behavior and the Unintended Consequences of Spatial Closures as a Fishery Management Tool." *Ecological Applications* 22(3) (2012): 762-777. (IF 4.39)

9. **Abbott[*], J.K.** and J.E. Wilen. "Dissecting the Tragedy: A Spatial Model of Behavior in the Commons." *Journal of Environmental Economics and Management* 62 (2011): 386-401. (IF 2.64)

8. **Abbott[*], J.K.** and H.A. Klaiber. "An Embarrassment of Riches: Confronting Omitted Variable Bias and Multi-Scale Capitalization in Hedonic Price Models." *Review of Economics and Statistics* 93(4) (2011): 1331–1342. (IF 3.51)

7. **Abbott[*], J.K.**, B. Garber-Yonts and J.E. Wilen. "Employment and Remuneration Effects of IFQs in the Bering Sea/Aleutian Islands Crab Fisheries." *Marine Resource Economics* 25(4) (2010): 333-354. (IF 1.85)

6. **Abbott[*], J.K.** and H.A. Klaiber. "Is All Space Created Equal? Uncovering the Relationship Between Competing Land Uses in Subdivisions." *Ecological Economics* 70(2) (2010): 296-307. (IF 3.90)

5. **Abbott[*], J.K.** and J.E. Wilen. "Voluntary Cooperation in the Commons? Evaluating Sea State with Reduced Form and Structural Models." *Land Economics* 86(1) (2010): 131-154. (IF 1.50)

4. **Abbott*, J.K.** and J.E. Wilen. "Rent Dissipation and Efficient Rationalization in For-Hire Recreational Fishing." *Journal of Environmental Economics and Management* 58 (2009): 300-314. (IF 2.64)

3. **Abbott*, J.K.** and J.E. Wilen. "Regulation of Fisheries Bycatch with Common-Pool Output Quotas." *Journal of Environmental Economics and Management* 57 (2009): 195-204. (IF 2.64)

1. **Abbott*, J.K.**, V. Maharaj and J.E. Wilen. "Designing ITQ Programs for Commercial Recreational Fishing." *Marine Policy* 33 (2009): 766-774. (IF 2.61)

Peer-Reviewed Books & Policy Reports

National Academies of Sciences, Engineering, and Medicine 2021. The Use of Limited Access Privilege Programs in Mixed-Use Fisheries. Washington, DC: The National Academies Press. https://doi.org/10.17226/26186.

Peer-Reviewed Book Chapters

R. Melstrom, B. Jungers[S], X. Bi, and **J.K. Abbott.** "Resource Economics for Understanding Recreational Fishers and Fisheries." In: Kevin Pope, Robert Arlinghaus, Len Hunt, Abby Lynch, and Brett van Poorten (eds.) *Understanding Recreational Fishers: Disciplinary and Interdisciplinary Approaches for Fisheries Management* (2026), pp. 123-156, Springer.

Fenichel, E.P., **J.K. Abbott***, and S.D. Yun. "The Nature of Capital and Ecosystem Income." In: Dasgupta, P., S. Pattanayak and V.K. Smith (eds.) *Handbook of Environmental Economics,* Vol. 4 (2018), pp. 85-142, Amsterdam: Elsevier.

Abbott*, J.K. and D. Holland. "Protecting Marine Ecosystems in Fisheries Regulation." In: Shogren, J.F., (ed.) *Encyclopedia of Energy, Natural Resource and Environmental Economics,* Vol. 2 (2013), pp. 206-214, Amsterdam: Elsevier.

Non Peer-Reviewed Journal Articles, Editorials, Book Reviews, etc.

Abbott*, J.K., M.D. Smith and J.N. Sanchirico. "Common Property Resources and the Dynamics of Overexploitation: The Case of the North Pacific Fur Seal—A 42-Year Legacy." *Marine Resource Economics* 33(3) (2018): 209-212.

Abbott*, J.K. "Beyond the Tragedy in Global Fisheries, by D.G. Webster" Review. *Marine Resource Economics* 33(2) (2018): 203-208.

Abbott*, J.K. "Editorial: Building on Strength." *Marine Resource Economics* 32(3) (2017): 243-248.

Manuscripts in Review

Treakle[S], T. and **J.K. Abbott**. "Job Impacts of the United States Endangered Species Act." In revision.

Jungers[S], B., **Abbott, J.K.**, and L. Bair. "Money Can't Buy Me Fish: Lessons from an Incentivized Harvest Program." In review.

Work in Preparation

J.K. Abbott, C. Costello, and B. Leonard. "Inviting Coase to the Pigouvian Party: When Does Voluntary Provision Enhance Welfare?"

F. Morency-Lavoie[S], L. Nøstbakken, and **J.K. Abbott.** "A Small Parasite Making Big Waves: Industry Consolidation Under Spatial-Dynamic Externalities."

Abbott, J.K., H.A. Klaiber, and V.K. Smith. "Economic Behavior, Market Signals and Urban Ecology." National Bureau of Economic Research Working Paper 20959: http://www.nber.org/papers/w20959

Other Academic Outputs (code, etc.)

Yun, S.D., E.P. Fenichel, and **J.K. Abbott.** "capn: Capital Asset Pricing for Nature" R package. Version 1.0.0 (2017). Available: https://cran.r-project.org/package=capn

Research Funding (current or past, contributions to project when co-PI in parentheses)

"Assessing the Distributional Effects of U.S. Catch Shares." **Role: PI,** Co-PI: Bryan Leonard. Walton Family Foundation. $321,000. 2022-2026.

"Economic Analysis for the Glen Canyon Dam Adaptive Management Program." **Role: Co-PI.** PI: Brenna Deerberg (PhD student). United States Geological Survey. $153,501. 2020-2026.

"Post-transitional Effects of Rationalization on the Crew Share System and Remuneration in the Alaskan Crab Fishery." **Role: Co-PI.** PI: Bryan Leonard. National Oceanic and Atmospheric Administration. $40,000. 2018-2019.

"Assessing Inclusive Ocean Wealth in the Bering Sea/Aleutian Islands." **Role: PI**. Lenfest Ocean Program. $252,300. 2016-2019.

"The Dynamics of Adaptation to Climate-Driven Variability in California Current Fisheries And Fishing Communities." **Role: PI**. National Science Foundation Coupled Natural-Human Systems Program. $1,500,000. 2016-2020.

"Reducing the Prohibited Species Catch of Pacific Halibut: A Prospective Analysis of Fleet Behavior in the North Pacific Groundfish Fisheries." **Role: PI of ASU subcontract**. North Pacific Research Board. $237,000. (ASU portion $60,000.) 2016-2018.

"Understanding Anglers' Valuation of Management Reforms for Gulf of Mexico Reef Fish." Environmental Defense Fund. **Role: PI**. $79,865. 2016-2018.

"Enabling Predictions of the Economic Consequences of Aquatic Invasive Species Establishment to Recreational Fishers on the Ontario Side of the Great Lakes" **Role: PI of ASU subcontract.** $183,772 (ASU portion $19,082.) 2016-2017.

"Catch Shares for the Recreational Commons? Examining a Natural Experiment for Headboats in the US Gulf of Mexico." **Role: PI.** Environmental Defense Fund Oceans Program. $183,000. 2012-2015.

"Predicting Changes in Commercial Fishing Behavior to Management Changes in the Gulf of Mexico Reef Fish Fishery." **Role: PI.** Co-PIs: Larry Perruso and Alan Haynie. Southeast Fisheries Science Center, National Marine Fisheries Service, NOAA. $41,933. 2011-2013.

"Collaborative Research: Land and Water Use Decision-Making and Ecosystem Services along a Southwestern Socio-Ecological Gradient." **Role: Co-PI on ASU sub-contract.** PI: Christopher Boone. Other Co-PIs: Daniel Childers, Sharon Hall, Abigail York. NSF Urban Long-Term Research Area (ULTRA) Exploratory Awards. $59,143. 2010-2012.

"The Joint Modeling of Seasonal Recreational Demand, Entry-Exit Decisions, and Fish Stocks over Time with an Application to Great Lakes Sportfishing." **Role: Co-PI.** PI: Eli Fenichel. NOAA Saltonstall-Kennedy Grant Program. $214,000. 2009-2012.

"Assessing Prohibited Species Bycatch Avoidance Behaviors and Outcomes in the Amendment 80 Fisheries of the North Pacific." **Role: PI.** Co-PI: Alan Haynie. Alaska Fisheries Science Center, National Marine Fisheries Service, NOAA. $29,000. 2009-2011.

"An Assessment of the Effects of Crab Rationalization on Fleet Behavior, Input Usage and Costs." **Role: PI.** Co-PI: Ronald Felthoven. Alaska Fisheries Science Center, National Marine Fisheries Service, NOAA. $45,135. 2008-2010.

Presentations and Workshop Participation

"Coase Meets Pigou: When Does Voluntary Provision on Top of Regulation Improve Welfare?" Association of Environmental and Resource Economists Summer Conference. Portland, ME. June 1, 2023.

(Invited) "Reducing Plastic Pollution: Policy Approaches." University of Rhode Island Global Plastics Forum. May 15, 2023.

"Species, Space, and Time: A Quarter-Century of Fishers' Diversification Strategies on the US West Coast." ASU School of Sustainability Research Seminar. October 26, 2022.

(Invited) "Species, Space, and Time: A Quarter-Century of Fishers' Diversification Strategies on the US West Coast." Department of Aquatic Resources, Swedish University of Agricultural Sciences. March 23, 2022.

"Risky (Natural) Assets: When Does Stochasticity Matter for Valuing Natural Capital?" Center for Environmental Economics and Sustainability Policy Seminar, Arizona State University. February 25, 2022.

"Risky (Natural) Assets: When Does Stochasticity Matter for Valuing Natural Capital?" BIOECON XXII Workshop. Jackson, WY. September 19, 2021.

(*Invited*) "Mechanisms to Improve the Efficiency of Recreational Fishing." North American Association of Fisheries Economists Webinar. April 27, 2021.

"How Smart are Water Smart Landscapes?" ASU Environment, Resource and Energy Economics Seminar. March 27, 2020.

"Structural Behavioral Models for Rights-Based Fisheries." AERE sponsored session on Fisheries Economics. Allied Social Science Association Annual Meeting. San Diego, CA. January 3-5, 2020.

(Invited) "Valuing Forage Fishes' Role (and Risk) in Exploited Marine Ecosystems." Symposium on The Ocean's Role in Sustainable Food Production. University of California, Davis. September 16-17, 2019.

(*Invited)* "Post-Transitional Effects of Rationalization on the Crew Share System and Remuneration in the Alaskan Crab Fishery." Property and the Environment Research Center, Bozeman, MT. July 10, 2019.

(*Invited*) "Using Economics to Reduce Marine Plastic Pollution." Kurt Grönfors Lecture. University of Gothenburg. Gothenburg, Sweden. May 7, 2019.

(*Invited)* "Structural Behavioral Models for Rights-Based Fisheries." Norwegian School of Economics, Bergen, Norway. May 3, 2019.

(*Invited*) "Structural Behavioral Models for Rights-Based Fisheries." Department of Economics Seminar, University of Connecticut. Storrs, CT. April 30, 2019.

(*Invited*) "Fishing to Live or Living to Fish? Job Satisfaction and Identify of West Coast Fishers." ASU Center for Behavior, Institutions and the Environment Seminar. March 18, 2019.

(*Invited*) "Research in the Economics of Sustainable Seafood: What's Next?" Peking University National School of Development. Peking, China. December 12, 2018.

"The Price-Tag of Regulated Open Access for For-Hire Recreational Fisheries." International Institute of Fisheries Economics and Trade Conference. University of Washington, Seattle, WA. July 17, 2018.

"Valuing Multiple Capital Stocks Under Correlated Volatility." 6th World Congress of Environmental and Resource Economics. University of Gothenburg, Sweden. June 28, 2018.

(Invited) "Measuring the Value of Natural Capital and the Wealth of Ecosystems." Department of Economics, Baylor University, Waco, TX. October 11, 2017.

(Invited) "An Introduction to Instrumental Variables (IV) Methods." Workshop on Cross-Disciplinary Socio-Environmental Statistics in the Anthropocene. National Socio-Environmental Synthesis Center, Annapolis, MD. September 29, 2017.

(Invited keynote) "Improving Recreational Fisheries Management: Some Thoughts from the Dismal Science." Keynote presentation for the 8th World Recreational Fishing Conference. Victoria, BC. July 19, 2017.

"Using multiple discrete-continuous extreme value (MDCEV) models to understand anglers' seasonal fishing behavior." 8th World Recreational Fishing Conference. Victoria, BC. July 18, 2017.

(Invited) "The Benefits of Escaping Recreational 'Derbies': Evidence from a Kuhn-Tucker Model of For-Hire Fishing in the US Gulf of Mexico." Arizona State University, Morrison School of Agribusiness Seminar. April 26, 2017.

"Intertemporal Substitution and the Value of Leisure Time: Evidence from Recreational Anglers in the Gulf of Mexico" Forum of the North American Association of Fisheries Economists. La Paz, Mexico. March 24, 2017.

(Invited) "The Benefits of Escaping Recreational 'Derbies': Evidence from a Kuhn-Tucker Model of For-Hire Fishing in the US Gulf of Mexico." Pennsylvania State University, Department of Agricultural Economics, Sociology and Education. November 9, 2016.

"Rights-Based Management for For-Hire Recreational Fisheries? Evidence from a Policy Experiment." International Institute of Fisheries Economics and Trade Conference. Aberdeen, UK, July 11-15, 2016.

"The Welfare Consequences of Recreational Derbies. Evidence from Surveys of Recreational Anglers." International Institute of Fisheries Economics and Trade Conference. Aberdeen, UK, July 11-15, 2016.

"The Benefits of Escaping Recreational 'Derbies': Evidence from a Policy Trial." Association of Environmental and Resource Economists Summer Conference. Breckenridge, CO, June 9-11, 2016.

"Growing into Water Conservation? Measuring the Drivers of Reduced Water Consumption in Las Vegas, NV." Association of Environmental and Resource Economists Summer Conference. Breckenridge, CO, June 9-11, 2016.

(Invited) "Measuring the Value of States' Natural Capital." States Natural Resource Damage Alliance Focus Group, Phoenix, AZ. May 10, 2016.

(Invited) "The Dynamics of Adaptation to Climate Driven Variability in California Current Fisheries And Fishing Communities." NOAA Workshop on Increasing Resilience of Fishing Communities in a Changing Climate, Silver Spring, MD. May 3-5, 2016.

"A Coupled Systems Approach to Assessing System Sustainability by Valuing Natural Capital." Conference on Complex Systems, Tempe, AZ. September 29, 2015.

(*Invited)* "Comprehensive Fishery Wealth: A Bioeconomic, Ecosystem-Based Approach to Measuring Fisheries Sustainability." Norwegian School of Economics, Bergen, Norway. June 23, 2015.

"Fighting Over a Red Herring: The Role of Economics in Recreational-Commercial Allocation Disputes." Forum of the North American Association of Fisheries Economists, Ketchikan, AK, May 20-22, 2015.

"Evaluating an Experimental Catch Shares Program for Gulf of Mexico Headboats: Year One." Forum of the North American Association of Fisheries Economists, Ketchikan, AK, May 20-22, 2015.

"Comprehensive Fishery Wealth: A Bioeconomic, Ecosystem-Based Approach to Measuring Fisheries Sustainability." Forum of the North American Association of Fisheries Economists, Ketchikan, AK, May 20-22, 2015.

(*Invited)* "Last Things First: The Folly of Recreational/Commercial Allocation Policy." Bevan Lecture Series on Sustainable Fisheries. School of Fisheries and Aquatic Sciences, University of Washington, Seattle, WA, February 12, 2015.

(*Invited)* "Moving Beyond the 'Metaphor' of Natural Capital for Furthering Green Economies." 5th International Conference on Sustainability Science. Tokyo, Japan, January 22-23, 2015.

(*Invited)* "Fighting Over a Red Herring: The Role of Economics in Recreational-Commercial Allocation Disputes." NOAA Workshop on Economic Considerations of Allocation Decisions. Seattle, WA, September 23, 2014.

(*Invited)* "What Can Economics Contribute?" Workshop on Managing Recreational Fisheries as Complex Adaptive Social-Ecological Systems. National Socio-Environmental Synthesis Center, Annapolis, MD, June 18-20, 2014.

"The Importance of Location and Timing of Fishing Effort for Bycatch Avoidance in the BSAI Non-Pollock Groundfish Trawl Fishery" Fisheries Bycatch: Global Issues and Creative Solutions. 29th Lowell Wakefield Fisheries Symposium, Anchorage, AK, May 15, 2014.

(*Invited)* "Natural Capital: From Metaphor to Measurement." Department of Economics, University of California, San Diego, May 7, 2014.

(*Invited)* "Some Like it (Less) Hot: Joint Valuation of the Urban Heat Island and Cooling Vegetation in a Desert City." Yale School of Forestry and Environmental Studies, April 23, 2014.

(*Invited)* "Natural Capital: From Metaphor to Measurement." Department of Agricultural and Resource Economics, University of California, Davis, April 9, 2014.

(*Invited)* "Natural Capital: From Metaphor to Measurement." Department of Agricultural and Resource Economics, University of Maryland, College Park, April 2, 2014.

(*Invited)* "Natural Capital: From Metaphor to Measurement." Resources for the Future. Washington, DC, April 1, 2014.

(*Invited)* "Recreational Fisheries: The Next Frontier for Rights-based Management?" Sustainable Fisheries Group Research Colloquium, UC Santa Barbara, March 18, 2014.

(*Invited)* "Natural Capital: From Metaphor to Measurement." Research Colloquium, Bren School of Environmental Science and Management, UC Santa Barbara, March 17, 2014.

(*Invited)* "Institutions, Incentives, and the Aquaculture Production Function: Insights from Capture Fisheries." Workshop on Salmon Aquaculture, Ås, Norway, August 27-28, 2013.

"Hidden Flexibility: Institutions, Incentives and the Margins of Selectivity in Fisheries." Association of Environmental and Resource Economists Summer Conference. Banff, Canada, June 6-8, 2013.

"Running to Stand Still? Common Property Induced Inertia in the Spatial Commons." Forum of the North American Association of Fisheries Economists, St. Petersburg, FL, May 21-24, 2013.

"Anticipating Adaptation: A Mechanistic Approach for Linking Policy and Stock Status to Recreational Angler Behavior." Forum of the North American Association of Fisheries Economists, St. Petersburg, FL, May 21-24, 2013.

(Invited) "Anticipating Adaptation: A Mechanistic Approach for Linking Policy and Stock Status to Recreational Angler Behavior." Joint seminar, Texas A&M University Department of Agricultural Economics and Department of Recreation, Parks and Tourism Sciences, April 5, 2013.

"The Value of Water as an Urban Club Good: A Matching Approach to Community-Provided Lakes." AERE Session, Allied Social Science Association Annual Meeting, January 6, 2013.

"Taming the Multispecies Fisheries Commons: The Amendment 80 Fleet of the Bering Sea/Aleutian Islands." ASU, Center for the Study of Institutional Diversity Seminar, March 12, 2012.

"Linking Empirical Modeling of Recreational Angler Behavior with Population Dynamics." American Fisheries Society Annual Meeting, Seattle, WA, September 8, 2011.

"Assessing the Short-Run Impacts of Cooperatives for the Reduction of Bycatch in the Multispecies Trawl Fleet of the Bering Sea/Aleutian Islands." American Fisheries Society Annual Meeting, Seattle, WA, September 6, 2011.

(Invited) "Taming the Multispecies Fisheries Commons: The Amendment 80 Fleet of the Bering Sea/Aleutian Islands." Workshop on Lessons Learned in Rights-Based Fisheries Management, Property and Environment Research Center, Bozeman, MT, July 26-29, 2011.

"The Value of Water as an Urban Club Good: A Matching Approach to HOA-provided Lakes." Association of Environmental and Resource Economists Summer Conference, Seattle, WA, June 8-10, 2011.

"An Introduction to Modeling Participation and Location Choice Decisions in Fisheries: Methodological Issues and Modeling." Forum of the North American Association of Fisheries Economists, Honolulu, HI, May 11-13, 2011.

"Linking Models of Recreational Angler Behavior and Fish Stocks for Better Management: A Discrete-Continuous Approach." Forum of the North American Association of Fisheries Economists, Honolulu, HI, May 11-13, 2011.

"Assessing the Short-Run Impacts of Cooperatives for the Multispecies Trawl Fleet of the Bering Sea/Aleutian Islands." Forum of the North American Association of Fisheries Economists, Honolulu, HI, May 11-13, 2011.

"Management Institutions and the Spatial Decision Making of Fishermen." ASU School of Geographical Sciences and Urban Planning Colloquium, April 29, 2011.

"What are we Protecting? The Challenge of Marine Protected Areas for Multispecies Fisheries." ASU Environmental and Resource Economics Workshop, March 26, 2011.

(*Invited)* "Implementing Kuhn-Tucker Demand Models in a Multi-Site, Multi-Species Bioeconomic Context." Workshop on Angling Behavior – Fisheries and Economic Approaches, Tempe, AZ, Feb 17-18, 2011.

(*Invited)* "Water, Water Everywhere: The Value of Water in Residential Lakes in an Arid City." A Community on Ecosystem Services, Phoenix, AZ, Dec. 8, 2010.

"Understanding Rent Dissipation and Optimal Management in Recreational Fisheries." International Institute of Fisheries Economics and Trade, Montpellier, France, July 12-16, 2010.

"What are we Protecting? Exploring the Side Effects of Marine Protected Areas in a Spatial Context." International Institute of Fisheries Economics and Trade, Montpellier, France, July 12-16, 2010.

"An Embarrassment of Riches: Confronting Omitted Variables Bias and Multi-Scale Capitalization in Hedonic Price Models." 4th World Congress of Environmental and Resource Economics, Montreal, Canada, July 2, 2010.

"Assessing Tradeoffs in Land Use Service Flows within Subdivisions at Multiple Spatial Scales." W2133 (USDA) Annual Meeting, Tucson, February 26, 2010.

(Invited) "Confronting Omitted Variable Bias and Multi-Scale Capitalization in Hedonic Price Models: A New (Old) Approach." Triangle Resource and Environmental Economics Seminar Series. Center for Environmental and Resource Economic Policy. North Carolina State University, Raleigh, NC, February 11, 2010.

"Confronting Omitted Variables Bias and Multi-Scale Capitalization in Hedonic Price Models: An Application to Open Space." ASU Environmental and Resource Economics Workshop, November 17, 2009.

(Invited) "Employment and Remuneration Effects in IFQ Fisheries: The Case of the Deadliest Catch." Workshop on Innovations in Property Rights for Fisheries Management, University of California Santa Barbara, October 19-21, 2009.

"An Embarrassment of Riches: Confronting Omitted Variables Bias and Multi-Scale Capitalization in Hedonic Price Models." 11th Occasional California Workshop on Environmental and Natural Resource Economics, Santa Barbara, CA, October 9-10, 2009.

"Considering Scale and Ecosystem Services in Hedonic Valuation of Subdivision Open Space." CAP-LTER All Scientist Meeting, September 10, 2009.

"Employment and Remuneration Effects in IFQ Fisheries: The Case of the Deadliest Catch." Forum of the North American Association of Fisheries Economists, Newport, RI, May 17-20, 2009.

"Flirting with Danger: The Analytical Challenge of Rare Event Bycatch." Forum of the North American Association of Fisheries Economists, Newport, RI, May 17-20, 2009.

"Rent Dissipation in Chartered Recreational Fishing: Inside the Black Box." Forum of the North American Association of Fisheries Economists, Newport, RI, May 17-20, 2009.

"Dissecting the Tragedy: A Spatial Model of Behavior in the Commons." AERE Special Session on New Fisheries Bioeconomics, American Agricultural Economics Association Annual Meeting, Orlando, FL, July 27-29, 2008.

"Rent Dissipation in Chartered Recreational Fishing: Inside the Black Box." AERE Special Session on New Fisheries Bioeconomics, American Agricultural Economics Association Annual Meeting, Orlando, FL, July 27-29, 2008.

"Assessing the Effectiveness of a Voluntary Bycatch Avoidance Program: Sea State." International Institute of Fisheries Economics and Trade, Nha Trang, Vietnam, July 22-25, 2008.

"Rent Dissipation in Chartered Recreational Fishing: Inside the Black Box." International Institute of Fisheries Economics and Trade, Nha Trang, Vietnam, July 22-25, 2008.

(Invited) "Assessing the Effectiveness of a Voluntary Bycatch Avoidance Program: Sea State." School of Fisheries and Aquatic Science, University of Washington, Seattle, WA, May 2, 2008.

(Invited) "Dissecting the Tragedy: A Spatial Model of Behavior in the Commons." Department of Economics, University of Washington, Seattle, WA, May 2, 2008.

"Dissecting the Tragedy: A Spatial Model of Behavior in the Commons." Center for the Study of Institutional Diversity Afternoon Tea, April 2, 2008.

"What Sustainability Means to Me: Leveraging the Power of Incentives for Sustainable Oceans." Sustainability Colloquium, School of Sustainability, February 14, 2008.

"Let the Games Begin: Strategic Behavior in Spatial Bycatch (Non)avoidance." in Special Session on *Modeling Fisher Behavior: State of the Art*, American Fisheries Society 137th Annual Meeting, San Francisco, CA, September 2-6, 2007.

"Casting a Wide Net: Common Property, Spatial Choice and Fisheries Bycatch in the Bering Sea." Forum of the North American Association of Fisheries Economists, Mérida, Mexico, March 27-30, 2007.

(Invited) "Casting a Wide Net: Strategic and Spatial Aspects of Fisheries Bycatch." Environment and Resource Group Workshop, Department of Economics, University of California San Diego, October 23, 2006.

"Bycatch in the Mixed Species Trawl Fisheries of the Eastern Bering Sea: A Model of Regulatory Institutions and Incentives." American Agricultural Economics Association Annual Meeting, Long Beach, CA, July 23-26, 2006.

"Do Fishermen Bother with Bycatch Avoidance? Evidence from the Bering Sea Mixed Species Trawl Fisheries." International Institute of Fisheries Economics and Trade, Portsmouth, UK, July 11-14, 2006.

"Bycatch in the Mixed Species Trawl Fisheries of the Eastern Bering Sea: A Model of Regulatory Institutions and Incentives." NOAA Fisheries/Sea Grant Fellowship in Population Dynamics and Marine Economics Symposium, San Diego, CA, March 2006.

"Spatial Choice and Fisheries Bycatch: The Eastern Bering Sea Flatfish Fisheries." 8th Occasional California Workshop on Environmental and Natural Resource Economics, Santa Barbara, CA, October 2005.

"Prohibited Species Bycatch in the Eastern Bering Sea Flatfish Fisheries: An Analysis of Institutions and Incentives." Forum of the North American Association of Fisheries Economists, Vancouver, CA, May 2005.

"Prohibited Species Bycatch in the Eastern Bering Sea Flatfish Fisheries: An Analysis of Institutions and Incentives." NOAA Fisheries/Sea Grant Fellowship in Population Dynamics and Marine Economics Symposium, Seattle, WA, April 2005.

"Conquering Space: Tools for Spatial Data Analysis in Economics." NOAA Fisheries Economics and Social Sciences Workshop, New Orleans, LA, October 2004.

"Spatial Competition in Overlapping Seasonal Fisheries: A Bioeconomic Model of Fishermen and Regulators." American Agricultural Economics Association Annual Meeting, Denver, CO, August, 2004.

Policy and Outreach Activities

Committee Membership

National Academy of Sciences, Engineering and Medicine. Committee on the Use of Limited Access Privilege Programs in Mixed-Use Fisheries. March 2020 – August 2021.

Public Testimony

"The Gulf Headboat Collaborative: A Socioeconomic Review." Testimony before the Gulf of Mexico Fishery Management Council. New Orleans, LA, August 16, 2016.

Testimony before the Gulf of Mexico Fishery Management Council Reef Fish Management Committee. Biloxi, MS, March 31, 2015.

Testimony before the Gulf of Mexico Fishery Management Council. Corpus Christi, TX, April 18, 2012.

Research Reports and Outreach Publications (non-peer-reviewed)

"Breaking Down China's Seafood Trade Pathways." Blog post: http://blogs.edf.org/edfish/2021/09/15/breaking-down-chinas-seafood-trade-pathways/#more-8082

"How much Money is Stored under our Feet?" *Environmental Science Journal for Kids* January 2017.

"Effects of the Two-Year Exempted Fishing Permit for the Gulf of Mexico Headboat Collaborative." Report to NOAA Fisheries. October 2016.

"Integrating Recreational Fisheries into Fisheries Management: Challenges and Opportunities." Report to the Organization of Economic Cooperation and Development. October 2013.

"New Study Finds Crew in Bering Sea Crab Fisheries Benefitted from Catch Shares." Invited guest blog post for Environmental Defense Fund: http://blogs.edf.org/edfish/2010/12/30/new-study-finds-crew-in-bering-sea-crab-fisheries-benefitted-from-catch-shares/

"The Alaska Bering Sea-Aleutian Islands Crab Fisheries." in *Economic Analysis of the Impacts of Catch Shares on Fisheries Employment and Income* (with Robert Trumble, Darrell Brannan, Gordon Gislason, Gunnar Knapp and Jill Swasey) Report to Environmental Defense Fund. September 2009.

"A Bioeconomic Model of Recreational Fishing in the For-Hire Sector." (with James Wilen) Report to Environmental Defense. 2007.

"Estimates of the Maximum Potential Economic Impacts of Marine Reserve Networks on the Central California Coast." (with James Wilen) Report to the California Marine Life Protection Act Initiative. 2006.

"An Empirical Assessment of Relative Importance Indicators for Fisheries off the Central Coast of California with Specific Application to the Market Squid Fishery." (with James Wilen) Report to the California Marine Life Protection Act Initiative. 2006.

Media coverage

Quoted in: "Clyde's fish stocks start to recover – with a different fish than before." *The Guardian.* https://www.theguardian.com/environment/2021/oct/07/clydes-fish-stocks-start-to-recover-with-a-different-fish-than-before

Teaching & Mentoring

Courses Taught (* indicates new course developed by me)

SOS 529*: Seminar in Environmental and Sustainability Economics
SOS 529/494*: Should I Eat Fish?
SOS 325*: Economics of Sustainability
SOS 511: Research Methods in Sustainability
SOS 540*: Statistical Modeling for Sustainability
SOS 512*: Environmental and Resource Economics
SOS/BIO/AML 691*: Mathematical Natural Resource Economics
SOS 589*: Community of Scholars
BIO 591: Seminar (ecoSERVICES lab group)

Workshop Advising

SOS 594: Valuation of Ecosystem Services in the Phoenix Area (S2008)
SOS 594: State Lands Workshop (F2007)

Online Course Development

"Economic Modeling Tools: Benefit-Cost Analysis" 5 lecture video module and evaluation tools for SOS 502: "Tools and Techniques of Sustainability" for the US Army and Army National Guard graduate academic certificate in Sustainability Leadership.

Postdoctoral Scholar Mentoring

Yutaro Sakai, 2018-2019. The Dynamics of Adaptation to Climate-Driven Variability in California Current Fisheries and Fishing Communities. Currently Associate Professor, University of Tokyo.

Jenny Apriesnig, 2017-2018. Assessing Inclusive Ocean Wealth in the Bering Sea/Aleutian Islands. Currently Assistant Professor, School of Business and Economics, Michigan Technological University.

Graduate Student Mentoring

Ongoing graduate students:

Tyler Treakle, Ph.D. candidate, School of Sustainability, co-chair.

Tanmoy Ghose, Ph.D. student, School of Sustainability, chair.

Felix Morency-Lavoie, Ph.D. candidate, Norwegian School of Economics, committee member.

Former graduate students:

Doctoral students

Kaitlyn Malakoff, Ph.D. 2026, School of Sustainability, committee member. Thesis title: Navigating global market connections for food and natural resource sustainability. Subsequent: Postdoctoral Scholar, Cornell University.

Brenna Jungers, Ph.D. 2023, School of Sustainability, committee chair. Thesis title: Managing Natural Capital for Nature-Based Recreation in the Anthropocene. Subsequent: Assistant Professor, Department of Agricultural Economics, Mississippi State University.

Katherine Wright, Ph.D. 2023, School of Sustainability, committee member. Thesis title: Analyzing Policy Approaches to Water Scarcity in the Western United States. Subsequent: Research Fellow, Property and Environment Research Center (PERC), Bozeman, MT.

Fatima Hafsa, Ph.D. 2022, School of Sustainability, committee member. Thesis title: Three Essays on Implementing a Sustainable Circular Economy for Plastics. Subsequent: Postdoctoral Scholar at WP Carey School of Business, ASU.

Marielle Abalo, Ph.D. 2021, School of Life Sciences, committee member. Dissertation title: Sentinels of the Sea: Marine Mammal Behavioral Responses to Environmental Change.

Seyyed Mahmoud Hashemi, Ph.D. 2021. School of Life Sciences, committee member. Dissertation title: Farmers' Adaptations to Groundwater Scarcity in the Rafsanjan Plain, Iran.

Hoon Cheol Shin, Ph.D. 2021, School of Human Evolution and Social Change, committee member. Dissertation title: Internal Stresses and Social Feedback Mechanisms in Social-Ecological Systems: A Multi-Method Approach to the Effectiveness of Exit and Voice. Subsequent: Postdoctoral Researcher, Institute of Water Policy, Lee Kuan Yew School of Public Policy, National University of Singapore.

Ashley Camhi, Ph.D. 2019, School of Life Sciences, committee co-chair. Dissertation title: The Conservation Reserve Program as a Payments for Water

Quality Case Study: An Environmental Economic Analysis. Subsequent: Senior Program Manager, LEAF Coalition, Amazon, Seattle, WA.

Kehinde Salau, Ph.D. 2019, Applied Mathematics, committee member. Dissertation title: Assessing the Effects of Institutional and Spatial Arrangements in Analytical and Computational Models of Conservation. Subsequent: Postdoctoral Scholar, University of Arizona; Data Science Senior Associate, JP Morgan Chase; Senior Data Scientist at Cardinal Health.

Sechindra Vallury, Ph.D. 2019, School of Sustainability, committee co-chair. Dissertation title: Institutions for Provision of Shared Infrastructure: Insights from Irrigation Systems in India. Subsequent: Postdoctoral Researcher Duke University and University of Montana; Assistant Professor, Odum School of Ecology, University of Georgia.

Patrick Lloyd-Smith, Ph.D. 2018, University of Alberta, Department of Agricultural and Resource Economics, committee member (external). Dissertation title: Fish, Time, and Water: Essays on Environmental Resource Trade-offs. Subsequent: Assistant Professor, University of Saskatchewan, Department of Agricultural and Resource Economics.

Maria del Mar Mancha, Ph.D. 2017, School of Life Sciences, committee member. Dissertation title: Going beyond Paper Parks in Marine Conservation: The Role of Institutions and Governance of Marine Reserves in the Gulf of California, Mexico. Subsequent: Postdoctoral Researcher, Nicholas School of the Environment, Duke University.

Jared Stoltzfus, Ph.D. 2016, School of Sustainability, committee member. Dissertation title: Facilitating Phosphorus Recovery Through Improved Waste Management. Subsequent: Assistant Professor, James Madison University, Harrisonburg, VA.

Rebecca Toseland, Ph.D. 2016, Department of Economics, UC Santa Barbara, committee member (external). Dissertation title: Three Essays on the Economics of Fisheries Management. Subsequent: Research Scholar Stanford Institute for Economic Policy Research; Senior Lecturer in the Department of Economics and Director of Research Support at the Tobin Center for Economic Policy.

Shahrzad Badvipour, Ph.D. 2015, College of Design, committee member. Dissertation title: Water and Energy Requirements for Outdoor Algal Cultivation in Panel and Raceway Photobioreactors. Subsequent: Postdoctoral Research Associate, Center for Negative Carbon Emissions, Arizona State University; Project Manager, Arizona Department of Environmental Quality.

Jay Abolofia, Ph.D. 2014, Department of Agricultural and Resource Economics, UC Davis, committee co-chair (external). Dissertation title: The Bioeconomics of a Common Property Pest: Parasitic Sea Lice and Farmed Salmonids. Subsequent: Founder, Lyon Financial Planning.

Allain Barnett, Ph.D. 2014, Environmental Social Science, committee member. Dissertation title: From Policy Instruments to Action Arenas: Toward Robust Fisheries and Adaptive Fishing Households in Southwest Nova Scotia. Subsequent: Postdoctoral Research Associate, Arizona State University; Policy Analyst, Natural Resources Canada.

Christa Brelsford, Ph.D. 2014, School of Sustainability, committee co-chair. Dissertation title: Whiskey is for Drinking; Water is for Fighting Over: Population Growth, Infrastructure Change, and Conservation Policy as Drivers of Residential Water Demand. Subsequent: Postdoctoral Scholar, Santa Fe Institute; Research Scientist, Oak Ridge National Laboratory.

Marie Fujitani, Ph.D. 2014, School of Life Sciences, committee co-chair. Dissertation title: Marine Reserves with Fisheries Management Regulations Aimed at People to Hit Biological Targets. Subsequent: Postdoctoral Researcher, Leibniz Centre for Tropical Marine Research (ZMT), Bremen, Germany; Professor, University of Bremen.

Biao Huang, Ph.D. 2014, School of Life Sciences, committee co-chair. Dissertation title: Bioeconomic Models and Sustainable Use of Marine Resources: Three Case Studies. Subsequent: Postdoctoral Scholar, Deakin University, Australia; Postdoctoral Scholar, Center for Ocean and Society, Kiel University.

Benjamin Warner, Ph.D. 2014, School of Sustainability, committee member. Dissertation title: Political Economic Barriers to Global Change Adaptations: A Study of Agrarian Rural Development in Northwest Costa Rica. Subsequent: Assistant Professor, Geography & Environmental Studies, University of New Mexico.

Matthew Reimer, Ph.D. 2012, Department of Agricultural and Resource Economics, UC Davis, committee co-chair. Dissertation title: Revisiting the Fishery Production Function: Space, Time and Policy Invariant Relationships. Subsequent: Assistant Professor, Department of Economics, University of Alaska, Anchorage; Associate Professor, Department of Agricultural and Resource Economics, University of California, Davis.

Masters students

Jonathan Russo, M.S. 2018, School of Sustainability, committee chair. Thesis title: Predicting Participation in the Las Vegas Water Smart Landscaping (WSL) Program. Subsequent: Energy Business Development Manager, North Dakota Department of Commerce; Industry Economist, U.S. Energy Information Administration.

Jing Liang, M.S. 2017, School of Sustainability, committee co-chair. Thesis title: Do energy retrofits work? Evidence from commercial and residential buildings in Phoenix. Subsequent: Ph.D., Policy Studies, University of Maryland; Postdoctoral

Researcher, Center for Policy Research on Energy and the Environment, Princeton University.

Micah Harp, M.S. 2016, School of Sustainability, committee member. Thesis title: Achieving conservation objectives with opportunity cost management strategies: A bio-economic simulation approach. Subsequent: Ph.D. candidate, Kansas State University, Department of Agricultural and Resource Economics.

Andrea Noziglia, M.S. 2015, School of Life Sciences, committee member. Thesis title: Flame Retardant Chemical Contamination of Seafood, Ecologically Sustainable Fisheries, and Significance for Biodiversity Conservation. Subsequent: Microplastics Monitoring Intern, Shaw Institute.

Yoshi Budiyanto, M.S. 2014, School of Sustainability, committee member. Thesis title: Water Efficiency in Agriculture: A Study of the Adoption of Water Conserving and Profitable Irrigation Technology in Arizona. Subsequent: Ph.D. student in School of Sustainability.

Cathy Rubinos, M.A. 2013, School of Sustainability, committee co-chair. Thesis title: Institutional Analysis of Water Management for Agriculture in the Chancay-Lambayeque Basin, Peru. Subsequent: Ph.D., Sustainability, ASU; Postdoctoral Researcher, ASU; Assistant Professor, Universidad del Pacifico, Lima, Peru.

Xuyang Tang, M.S. 2013, School of Sustainability, committee co-chair. Thesis title: Food Environment around School and Students' Weight Status: A Study of Four New Jersey Low-Income Communities. Subsequent: Ph.D. in Public Health, University of Minnesota; Researcher, Centre for Global Health Research, Unity Health Toronto and University of Toronto.

Ted Gilliland, M.S. 2012, School of Life Sciences, committee member. Thesis title: Two Essays on the Trade-Offs Between Multiple Policy Objectives of Environmental Management Efforts. Subsequent: Ph.D., Agricultural and Resource Economics, University of California, Davis; Assistant Professor, Department of Economics, Mount Holyoke College, South Hadley, MA.

Robert Meyers, M.S. 2010, School of Sustainability, committee member. Thesis title: A Model for Estimating Emissions and Costs of Competing Energy Systems: Dynamic Scenarios of Photovoltaic Rollout in the US. Subsequent: Physical Scientist at US Environmental Protection Agency.

Brittany DeKnight, M.A. 2009, School of Sustainability, committee member. Subsequent: Associate Director, Shi Center for Sustainability, Furman University.

Undergraduate students:

Emily Joiner, Honors thesis advisor, Thesis title: Golf Courses in Maricopa County: An Application of the Hedonic Pricing Method. 2018. Subsequent: Masters of

Agricultural and Resource Economics, University of Arizona; Research Analyst, Resources for the Future, Washington, D.C.

Saritha Ramakrishna, Honors thesis advisor, Thesis title: Application of the Hedonic Estimation Method to South Mountain Municipal Park. 2015. Achievements: Masters in City Planning, Massachusetts Institute of Technology; Associate, Kyanite Partners, Brooklyn, NY.

Professional Service and Activities

Editorial Activities

Editor-in-Chief, *Marine Resource Economics (2017-2024)*
Co-Editor, *Journal of the Association of Environmental and Resource Economists (2016-2021)*
Associate Editor, *Marine Resource Economics (2014-2016)*
Editorial Council, *Journal of the Association of Environmental and Resource Economists (2014-2016)*

Manuscript Referee

American Journal of Agricultural Economics, Canadian Journal of Agricultural Economics, Canadian Journal of Fisheries and Aquatic Sciences, Ecological Applications, Ecological Economics, Ecology and Society, Environmental and Resource Economics, Fish and Fisheries, Fisheries Research, International Journal of the Commons, Journal of Choice Modeling, Journal of the Association of Environmental and Resource Economists, Journal of Environmental Economics and Management, Land Economics, Leisure Sciences, Marine Policy, Marine Resource Economics, Natural Resource Modeling, Nature Sustainability, North American Journal of Fisheries Management, Proceedings of the National Academy of Sciences, Resource and Energy Economics, Science, Southern Economic Journal

Grant Referee

California Sea Grant
MARFIN Grant Program (NOAA)
NOAA/Sea-Grant Fellowship in Marine Resource Economics
Oregon Sea Grant
Rhode Island Sea Grant
Saltonstall-Kennedy Grant Program (NOAA)

Memberships

American Economic Association
Association of Christian Economists
Association of Environmental and Resource Economists
International Institute of Fisheries Economics and Trade
North American Association of Fisheries Economists

Service for Professional Associations

North American Association of Fisheries Economists, Scientific Committee for 7th Biennial Forum

North American Association of Fisheries Economists, Best Student Paper Prize Selection Committee, 2011, 2015

Conference or Workshop Organization

Steering Committee for NOAA Fisheries Recreational Economic Constituent Workshop (with academics and stakeholders). March 24-25, 2020.

"Session in Honor of the Contributions of James Wilen to Fisheries Economics." International Institute of Fisheries Economics and Trade Conference. University of Washington, Seattle, WA. July 17, 2018.

"An Introduction to Modeling Participation and Location Choice Decisions in Fisheries." Forum of the North American Association of Fisheries Economists, Honolulu, HI, May 11-13, 2011 (educational session co-organized with Daniel Holland, Alan Haynie and Lisa Pfeiffer).

"Workshop on Modeling Recreational Angling Behavior – Fisheries and Economic Approaches." ASU, Tempe, AZ, February 17-18, 2011 (co-organized with Eli Fenichel).

Departmental Service

Co-chair, Sustainability Strategic Planning Committee, Spring 2020
Chair, Sustainability MA/MS/PhD Subcommittee, 2019-2020, 2021-2022
Chair, School of Sustainability Faculty Advisory Committee, 2019-2020, 2021-2022
School of Sustainability Graduate Committee, 2010-Spring 2020
School of Sustainability Bylaws Ad-Hoc Committee, Fall 2018-Spring 2019.
Chair of School of Sustainability Faculty Search Committee, 2015-16, 2014-15 & 2018-2019
Interim Graduate Director for School of Sustainability, Spring/Summer 2017
Chair of School of Sustainability Graduate Curriculum Revision Committee, 2013
School of Sustainability Personnel Committee, 2013
School of Sustainability Wrigley Speaker Committee, 2012, 2018
School of Sustainability Library Liaison, 2010-
School of Sustainability Undergraduate Committee, 2009-2010
School of Sustainability Curriculum Committee, 2007-2009

University Service

Organizer for Center for Environmental Economics and Sustainability Policy Seminar Series.

Developer and Faculty Administrator, ASU Graduate Certificate in Environmental and Sustainability Economics.