



Steven D. Gaines

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Experience

Dean, Bren School of Environmental Science & Management, UCSB – 2010 to present
Director, Marine Science Institute, UC Santa Barbara – 1997-2009
Acting Dean of Science, UC Santa Barbara – 2007-2008
Acting Vice Chancellor for Research, UC Santa Barbara – 2002-2005
Distinguished Professor, UC Santa Barbara – 2010 to present
Professor, UC Santa Barbara – 1998-2010
Associate Professor, UC Santa Barbara – 1994-1998
Associate Professor, Brown University – 1993-1994
Assistant Professor, Brown University – 1987-1993
Research Associate, Stanford University – 1986-1987
Postdoctoral Fellow, Stanford University, with J. Roughgarden – 1982-1986

Education

University of California, Irvine – B.Sc. 1977
Magna Cum Laude, Phi Beta Kappa, Regents Scholar.
Oregon State University – Ph.D. 1982;
advisors: Jane Lubchenco and Bruce Menge

Research Interests

conservation biology, biogeography, sustainable fisheries and aquaculture, climate change, population and community ecology, biostatistics, marine ecology

Awards/Special Appointments

Editorial Board, *Estuaries* (1990-92)
Co-chair, Organizing Comm., 20th Benthic Marine Ecology Meetings, Newport, RI (1992)
Editorial Board, *Ecology & Ecological Monographs* (1992-95)
Scientific Advisory Board, GLOBEC program, National Science Foundation (1992-95)
Scientific Advisory Board, Southern California Intertidal Monitoring Program (1997-98)
Editorial Board, *American Naturalist* (1998-2001)
OUEVRE Visioning Committee for NSF Biological Oceanography (1998)
University of California, Marine Council (1999-2008)
Scientific Advisory Panel, Channel Islands National Marine Sanctuary (1999-2002)
Curtis and Edith Munson Distinguished Lecturer, Yale University (2002)
Board of Trustees, Conservation Biology Research Inst., Aquarium of the Pacific (2001-2002)

Master Planning Team, California Marine Life Protection Act (2001-2004)
Executive Committee, Board on Oceans and Atmosphere, NASULGC (2003-2006)
Pew Fellow in Ocean Conservation (2003-2006)
Science Advisory Panel, California Marine Life Protection Act (2005-2009)
Advisory Panel, California Ocean Policy (2004)
Advisory Board, Oiled Wildlife Care Network (2003-2009)
Jenner Lecturer, University of North Carolina (2005)
SCERP Lecturer, California State University, Fullerton (2006)
Science Advisory Group, Interagency Ecological Prog, CA Dept of Water Res. (2006-2009)
Science Advisor, Joint Ocean Commission (2006-2012)
MLPA Baseline Science-Management Panel (2006)
Keynote Speaker, 3rd Int'l Biogeography Society Meeting, Tenerife, Canary Islands (2007)
Keynote Speaker, Natural England, Towards a Coherent Network of Marine Protected Areas (2007)
Keynote Speaker, Marine Protected Areas on the High Seas, Honolulu, Hawai'i (2007)
Ocean in Google Earth - MPA Advisor (2007-2009)
Bevan Lecturer, University of Washington (2008)
Chair, Science Advisory Panel, California Current Ecosystem Based Management (2007-08)
Marine Protected Area Federal Advisory Committee (2008-2011)
Science Advisory Team, California Ocean Protection Council (2008-2018)
Organization for Economic Co-Operation and Development Best Paper Award (honorable mention), Nha Trang, Vietnam; with J. Lynham and C. Costello (2008)
Editorial Board, Annual Review of Ecology, Evolution, and Systematics (2008-2013)
Top Science Study of 2008, Costello, Gaines & Lynham (Science), chosen by Editors of Nature magazine (2008)
Erskine Fellow, Canterbury University (2009)
America's Climate Choices, National Academy of Science Panel (2009-2010)
Inaugural Marc Hirshman Award for Excellence in Mentoring (2009), chosen by the Joint Ocean Commission
Oceans Committee, Environmental Defense Fund Board (2009 to present)
Board of Trustees, Communication Partnership for Science and the Sea - COMPASS (2009 to 2021)
Fellow, American Association for the Advancement of Science (2010)
Science Advisory Council, Conservation International (2011-2013)
National Science Foundation, Geosciences Advisory Panel (2011-14)
Advisory Board, MARVIVA (2011-2014)
Board of Trustees, Rare (2011 to present)
Steinbach Scholar, Woods Hole Oceanographic Institution (2012)
National Science Foundation Committee of Visitors (2012)

Newell Scholar, University of Florida (2013)
Sutherland Memorial Lecturer, Duke University (2014)
Peter Benchley Ocean Award for Excellence in Science (2014)
Teale Lecturer, University of Connecticut (2014)
Board of Trustees, NOAA National Marine Sanctuary Foundation (2014 to present)
Board of Trustees, Resources Legacy Fund (2014 to present)
Keynote Speaker, Western Society of Naturalists (2015)
Thomson Reuters Highly Cited Researcher (2015) - Environment & Ecology
Plenary Speaker, SeaWeb Seafood Summit, Malta (2016)
Plenary Speaker, BIONEERS (2016)
Plenary Speaker, Sustainable Foods Institute, Monterey (2016)
Thomson Reuters Highly Cited Researcher (2016) - Environment & Ecology
Plenary Speaker, Shared Mission Conference, Montecito (2016)
Vulcan Advisory Committee on Oceans (2017-18)
TEDx Santa Barbara, The Future of Food: the Rise of the Sea (2017)
Clarivate Analytics, Web of Science Group, Highly Cited Researcher (2017) - Cross Field Influence
U.S.-China Joint Scientific Experts Group (2017 to 2019)
Plenary Speaker, SeaWeb Seafood Summit, Barcelona (2018)
Guest Editor, PNAS (2018)
Clarivate Analytics, Web of Science Group, Highly Cited Researcher (2018) - Cross Field Influence
Keynote Speaker, Cold Harvest 2018, St. Johns, Newfoundland (2018)
Expert Group, High Level Panel for a Sustainable Ocean Economy (2018-19)
Guest Editor, Scientific Reports (2019)
Clarivate Analytics, Web of Science Group, Highly Cited Researcher (2019) - Cross Field Influence
Guest Editor, PLOS Biology (2020, 2021)
Pathways to 30x30 Advisory Panel, California Natural Resources Agency (2021-2022)

Research Funding

National Science Foundation, Causes and Consequences of Variable Recruitment in the Acorn Barnacle *Semibalanus balanoides*, 1990-94, with M. Bertness -- \$397,492.

A. W. Mellon Foundation, The Dynamics of Marine Ecosystems, 1992-96, with M. Bertness -- \$300,000.

National Science Foundation, Is Variable Retention of Larvae Nearshore a General Cause of Variable Recruitment, 1994-97, with M. Bertness -- \$408,796.

NOAA, Sea Grant, Dispersal of zebra mussels, 1994-97, with L. Johnson -- \$19,303.

Department of Energy, National Institute for Global Environmental Change, Climate Change and Marine Ecosystems: the Integrity of Biogeographic Boundaries,1995-98 -- \$247,000.

NASA, Investigations of Coastal Marine Communities as a Means to Understanding Effects of Global Climate Change,1995-98, with R. Sagarin -- \$66,000

A. W. Mellon Foundation, The Dynamics of Marine Ecosystems: Measuring the Connectedness of Marine Communities,1996-99 -- \$300,000

W. M. Keck Foundation, The Coastal Research Initiative: New Links Between Ocean Physics and Marine Population Dynamics,1996-98, with S. Holbrook, R. Schmitt, R. Warner, L. Washburn -- \$650,000.

US Dept. of Interior-Minerals Management Service, Application of Coastal Ocean Dynamics Radars for Observation of Near-Surface Currents off the South-Central California Coast,1996-99, with L. Washburn -- \$299,790.

InterAmerican Institute for Global Change Research, Links Between Coastal Productivity, Benthic Communities, and Biogeographic Boundaries in Chile and California,1996-98, with S. Navarrete & L. Washburn -- \$94,114.

United States-Israel Binational Science Foundation, The role of limited-recruitment in coral-reef deterioration,1997-2000, with A. Abelson & L. Washburn -- \$168,000.

National Science Foundation, What Sets Range Limits in the Ocean? The Stability of Biogeographic Boundaries in a Changing Climate,1998-99; \$29,000

National Science Foundation, LTER: Land/Ocean interactions and the Dynamics of Coastal Reef Communities,1999-2005; with D. Reed, S. Cooper, S. Holbrook, & J. Melack -- \$4,200,000

David and Lucile Packard Foundation, PISCO: Partnership for Interdisciplinary Studies of Coastal Oceans,1999-2004; with R. Warner -- \$6,475,000

Andrew W. Mellon Foundation, Interhemispheric Comparisons of Marine Ecosystems,1999-2002, \$200,000

Andrea W. Mellon Foundation, International Partnership in Environmental Informatics,2000-2003; \$170,000

UC Mexus, Environmental Suitability Across Geographic Ranges,2000-01; \$15,000

University of California Faculty Outreach Grants, Floating Classroom Program,2000-2002; \$100,000

Minerals Management Service, Observing the Surface Circulation along the SouthCentral California Coast Using High Frequency Radar,2000-02; with L. Washburn -- \$224,000

Minerals Management Service, Advancing Marine Biotechnology,2000-02; with R. Schmitt, L. Wilson, S. Holbrook, A. Brooks, R. Jacobs -- \$500,000

Arenz Foundation, Enhancing the Science of Marine Reserves,2002-2004; \$30,000

National Science Foundation, Capturing Data in the Field: An Application Framework for Easily Creating Custom Data and Metadata Entry Forms on Handheld and Desktop Computers,2002-2005; with M. Jones, C. Jones, & C. Blanchette -- \$887,634

UC Mexus, Effects of climate change on marine ecosystems,2002-2004; \$20,000

University of California Marine Council, Dynamic characterization of marine habitats,2002-2004; \$50,000

University of California Faculty Outreach Grants, Floating Classroom Program,2002-2003; \$105,000

University of California Faculty Outreach Grants, Floating Classroom Program,2003-2004; \$45,000

Boyd Foundation, Summer Enrichment and Sabbatical Experience for Teachers (SEASET); \$130,000

National Science Foundation, Biocomplexity: Flow, Fish, and Fishing: Disparate Scales of Process Make Fishery Management a Difficult Task,2003-2008; with D. Siegel, C. Costello, R. Hilborn, R. Warner,2003-2008; \$1,995,951

Andrew W. Mellon Foundation, Linking community ecology and biogeography: the causes of large scale variation in marine ecosystems,2003-2006; \$360,000

David and Lucile Packard Foundation, PISCO: Partnership for Interdisciplinary Studies of Coastal Oceans,2004; with R. Warner; \$1,290,000

Pew Foundation, The science of marine reserve networks,2003-2006; \$150,000

National Science Foundation, with D. Zacherl and R. Warner.Tracking Larval Invertebrate Dispersal Using Calcified Structures,2004-2007; \$268,000.

David and Lucile Packard Foundation & Gordon and Betty Moore Foundation, PISCO: Partnership for Interdisciplinary Studies of Coastal Oceans,2005-2009; with R. Warner, L. Washburn, and G. Hofmann; \$24.5 million (UCSB share \$8 million)

Vulcan Inc., planning grant for the Global Solutions Institute; with J. Reichman, J. Melack, and D. Aigner.2005-2007. \$400,000.

Resources Legacy Fund Foundation, MLPA Initiative Evaluation Tool.2005-2008; with W. McClintock. \$326,372.

University of California Marine Council, Population connectivity of coastal fishery species across the US-Mexico international border,2005-2008; with G. Bernardi, and R. Grosberg; \$370,000.

National Atmospheric and Oceanic Administration, Construction funds for the headquarters of the National Marine Sanctuary Program and the Outreach Center for Teaching Ocean Science (OCTOS).2005-2010; \$6,495,699.

Paul G. Allen Foundation, New Approaches to Sustainable Fisheries; with C. Costello, J. Melack, and J. Reichman.2006-2009. \$5,000,000.

Foundation for Research Science and Technology, New Zealand, The Effect of Marine Reserves on Fishing.2006-2009; with N. Shears. \$159,237.

National Atmospheric and Oceanic Administration, Graduate Fellowship.2006-2008; with C. Addison. \$22,400.

National Science Foundation, LTER:Land/Ocean Interactions and the Dynamics of Kelp Forest Communities.2006-2012; with D. Reed, and more than 20 other UCSB investigators. \$5,039,999.

David and Lucile Packard Foundation, New Advances in the Science of Marine Reserves, Second Editions of: The Science of Marine Reserves. United States and International Versions.2006-2008; with J. Lubchenco, B. Simler and S. Airame. \$250,000.

NASA, Remote Sensing of Kelp Forest Dynamics; with D. Siegel, D. Reed, P. Kyriakidis, R. Zimmerman.2007-2010. \$859,049.

David and Lucile Packard Foundation, The Science of Marine Reserves. Latin American and Caribbean Version.2007-2008; with J. Lubchenco, K. Grorud-Culver and S. Airame. \$250,000.

Henry Luce Foundation, Science to Solutions.2007-2011; with J. Melack, A. Alldredge, B. Luyendyck, O. Chadwick, and J. Reichman. \$450,000

Andrew W. Mellon Foundation, Making Connections: Predicting Variation in Larval Dispersal at Biogeographic scales.2007-2009. \$200,000

Marisla Foundation, Sustainable Fisheries Group - California Fisheries Fund.2007-2008; with C. Costello. \$1,000,000.

Santa Monica Bay Restoration Foundation, GIS Support for the Analysis of Data Gaps on Habitats and Resources in Santa Monica Bay; with W. McClintock.2007-2008. \$75,602.

UC Discovery Grant-Fellows Program, Venture Acceleration Initiative; fellow funding for Raphael Simon;2007-2008. \$115,400.

Resources Legacy Fund Foundation, The California Marine Life Protection Act Decision Support System: Recommendations for Development and Maintenance for the North Central Coast Study Region.2007-2008; with W. McClintock. \$203,196.

Paul G. Allen Foundation, Digital Ocean.2008; with C. Penley, J. Melack, R. Rice. \$100,000.

Society for Conservation Biology, Forecasting the Ecosystem-Level Effects of Marine Reserves to Inform Ecosystem-Based Management. Smith Fellowship for Anne Salomon.2008-2010. \$78,174.

David and Lucile Packard Foundation, PISCO Organizational Effectiveness Project: Securing the future for an integrated large marine ecosystem research program.2008; with J. Lubchenco, K. Milligan. \$150,000.

David and Lucile Packard Foundation. The Science of Marine Reserves. Web Edition.2008-2009; with J. Lubchenco, K. Grorud-Culver, B. Simler. \$100,000.

MacArthur Foundation. Sampling the Sea: Using Social Networking Tools to Enhance Marine Education and Conservation; with C. Penley, R. Rice, and J. Melack. \$230,000.

David and Lucile Packard Foundation. PISCO: Partnership for Interdisciplinary Studies of Coastal Oceans. 2010-2014; with R. Warner, G. Hofmann and 9 other PIs across 4 universities. \$5,000,000

Gordon and Better Moore Foundation. PISCO: Partnership for Interdisciplinary Studies of Coastal Oceans. 2010-2012; with J. Caselle, M. Carr, P. Raimondi. \$2,000,000

Walton Family Foundation. Sustainable Fishing at the Bottom of the Food Web; with C. Costello. 2010; with C. Costello. \$125,000.

Waitt Foundation. Sustainable Ocean Solutions through Rights-Based Management, Fisheries Certification, and Marine Protected Areas; 2011-2014; with C. Costello, R. Deacon, and S. Lester. \$2,400,000.

Walton Family Foundation. Latin American Fisheries Fellows; with C. Costello. 2011-2014; \$1,740,614.

Gordon and Betty Moore Foundation, Forecasting the Food Security Benefits of Improving Fisheries Management; with C. Costello; 2011-1012; \$100,900.

David and Lucile Packard Foundation, Using Private Financing to Drive Fisheries Reform; with C. Costello and S. Lester; 2011-2012; \$82,897.

NOAA SeaGrant, Social and Economic Effects of ITQs on the West Coast Groundfish Fishery; with C. Costello, B. Deacon; 2012-2014; \$110,385.

Walton Family Foundation, Sustainable Water Market Fellows; 2012-2014; \$787,500.

NOAA SeaGrant, Maximizing the value of offshore aquaculture development in the context of multiple ocean uses; with S. Lester, C. White; 2012-2015; \$500,000.

Bloomberg Foundation, Fisheries Baseline and Restoration Analysis for Brazil, Chile, India and the Philippines; with S. Lester; 2012-2013; \$35,000.

Waitt Foundation. Fish Forever; 2013-2018; with S. Lester, C. Costello, Rare and Environmental Defense Fund; \$2,900,000.

MacArthur Foundation. Fish Forever; 2013-2015; with S. Lester, C. Costello, Rare and Environmental Defense Fund; \$1,500,000.

Rare, Fish Forever; 2013; \$75,000.

Walton Family Foundation, Sustainable Water Market Fellows; 2014-2016; \$562,228.

Walton Family Foundation, Latin American Fisheries Fellows; with C. Costello; 2014-2016; \$1,420,000.

Bloomberg Foundation, Vibrant Oceans; 2013; with S. Lester, C. Costello; \$75,000

Conservation International, Fisheries Sustainability in Galapagos; 2013-2015; \$200,095.

Ocean Conservancy, Reimagining Fisheries Management; 2015-2016; with C. Costello; \$258,750.

The Nature Conservancy, Making the case for fisheries reform in the East China Sea: Renewal; 2015-2016; with C. Costello, C. Szuwalski; \$49,029

University of California, UC Food Initiative: Market Interactions and Social Dynamics; 2015-2016; with C. Costello; \$30,000.

Walton Family Foundation, Latin American Fisheries Fellows; with C. Costello; 2015-2017; \$794,659.

Walton Family Foundation, Sustainable Water Market Fellows; 2015-2017; \$681,451.

Rare, Fish Forever; 2016; with C. Costello; \$50,000.

Packard Foundation, Collaborative Modeling to Inform Strategic Institutional and Policy Reform in Indonesia; with C. Costello; 2016-2017; \$250,000.

Packard Foundation, Capacity Building in China Through Research; with C. Szuwalski and C. Costello; 2016-2018; \$500,000.

Bloomberg Philanthropies, Forecasting the Impacts of the Vibrant Oceans Initiative; with C. Costello; 2016; \$65,000.

Walton Family Foundation, Latin American Fisheries Fellows; with C. Costello; 2016-2018; \$767,086.

National Geographic Society, Pristine Seas; with C. Costello; 2016-2018; \$200,920.

Walton Family Foundation, Sustainable Water Market Fellows; 2016-2018; \$683,823.

National Science Foundation, Crossroads: Integrating Interdisciplinary Research and Training in Graduate Education; with B. Kendall, M. Hegarty, C. Genetti; 2016-19; \$499,943.

Packard Foundation, Analysis of Fisheries Management and Climate Change; with C. Costello; 2016-18; \$230,579

National Geographic Foundation, Pristine Seas; with C. Costello; 2017; \$100,404.

National Science Foundation, Assessing the Effects of Tourism Development on Small-Scale Fisheries; 2017-2018; \$12,800.

Nature Conservancy, Sustainable Fisheries; with C. Costello; 2017-18; \$35,000.

Walton Family Foundation, Latin American Fisheries Fellows; with C. Costello; 2017-2020; \$1,177,045.

Waitt Foundation, Sustainable Ocean Solutions; with C. Costello, S. Lester; 2017-2020; \$1,600,000.

Walton Family Foundation, Sustainable Water Market Fellows; 2018-2020; \$1,093,967.

Environmental Defense Fund, Climate Change Impacts on Fisheries; 2018-2019; \$50,000.

National Geographic Society, Mapping Global Conservation Priorities; 2018-2020; \$217,241.

Grantham Foundation, Seaweed Aquaculture: A Climate Mitigation Strategy Worth Pursuing?; 2019-2020; \$189,240.

Zegar Family Foundation, Combining Historical Ecology with New Tools to Understand Climate Effects on Species Distributions: 2019-2021; \$194,902.

NOAA: Fisheries Interactions & Carbon Offsets: Assessing Existing and Potential Seaweed Aquaculture: 2019-2021; \$220,255.

The Builders Initiative, Innovative Ocean Climate Solutions: 2020; \$250,533.

Arnhold Foundation, Tackling Our Climate Crisis, A Collaboration with Conservation International: \$6,000,000.

Bureau of Ocean Energy Management, Using Outcomes from Marine Protected Area Implementation to Infer Potential Socioeconomic Consequences of Offshore Energy Development to Commercial Fisheries: 2021-2023; \$475,000.

The Builders Initiative, Financial tools and behavior change for resilient fisheries and ocean ecosystems: 2021-2023; \$280,875.

Chile National Agency for Research & Development, Rejuvenating global ecosystem management: Integrating children's perceptions to support more equitable, sustainable coasts: 2022-2025; \$

National Science Foundation, DISES :2023-2027; \$1,600,000

Students Supervised

POSTDOCTORAL SCHOLARS

Phil Yund, Richard Wahle, Ladd Johnson, Suzi Worcester, Sergio Navarrete, Carol Blanchette, Laura Gonzalez, Cynthia Cudabak, Brian Gaylord, Dov Sax, Michael Hickford, William McClintock, Ellen Damschen, Anne Salomon, Nick Shears, Cesar Vilas, Brian Kinlan, Christy Henzler, Andrew Rassweiler, Crow White, Jono Wilson, Elena Ojea, Bruno Nkuiya, Grant McDermott, Frederik Noack, Matt Burgess, Darcy Bradley, Kimberly Lai, Ren Cabral, Chris Field, Rae Wynn-Grant, Anastasia Quintana*, Tammy Elwell*

PHD STUDENTS

Alice Brown, Sally Hacker, Patricia Halpin, Ginny Eckert, Rafe Sagarin, Carol Thornber, Danielle Zacherl, Nicole Phillips, Bernardo Broitman, Julie Kellner, Kim Selkoe, Mike Behrens, Kate Smith, Sarah Lester, Brian Kinlan, Elizabeth Madin, Robin Pelc, Kristin Carden, Stephen Gosnell, Katherine Emery, Lisa Needles, Rebecca Selden, Ashley Larsen, Laura Dee, Cristiane Elfes, Sarah Teck, Jorge Cornejo Donoso, Lindsey Peavey, Darcy Bradley (co-chair), Rebecca Gentry, Erendira Aceves Bueno, Claudia Sciana (co-chair, Université Nice Sophia Antipolis), April Ridlon (co-chair), Dan Ovando (co-chair), Becky Wright, Daniel Viana, Nick Schooler (co-chair), Owen Liu, Alexa Fredston-Hermann (co-chair), Karly Miller (co-chair), Jade Sainz (co-chair), Molly Wilson (co-chair), Juan Carlos Villaseñor Debez (co-chair), Julia Lawson*, Phoebe Racine* (co-chair), Ignacia Rivera*, Mary McElroy* (co-chair), Liliana Castillo*, Cori Lopazanski* (co-chair), Mukta Kelkar* (co-chair), Leonardo Feitosa*, Karina Johnston* (co-chair), Allie Caughman* (co-chair), Erin Winslow* (co-chair), Yutian Fang* (co-chair), Bonnie Basnett* (co-chair), Olivia Isbell* (co-chair)

MASTERS STUDENTS

Peter Taylor, Stephanie Best (co-chair), Cristine McConnell, Jason Bram (co-chair), Clara Svedlund, Thom Young (co-chair), Christine Addison (co-chair), Peggy Lynch, Sarah Rathbone, Lisa Max, Shaun Walbridge, Frank Hurd, Michaela Clemence, Jeff Young, Heather Lahr, Asma Mahdi, Clara Cartwright, Stephanie Horii, Niki Mazaroli, Amanda Nelson, Katherine Nixon, Ariadne Reynolds, Matias Caillaux, Miguel Cosmelli, Jessica Fuller, Yoel Kirschner, Tracey Mangin, Stephanie Thornton, Taylor Debevec, Laura Johnson, Norah Eddy, Jonathan Sim, Katie Westfall, Rebecca Toseland, Francesca de Leon, Steven Johnson, Jacob Marcon, Natalie Phares, Kendall Mills, Jennifer Bone, Laura Lee Rubino, Elena Meza, Lily Tsukayama, Sam Furtner, Adam Qian, Isabella Marril, Stephanie Gad, Denise Garcia, Sarah Salem, Roxanne Diaz, Camila Vargas, Fabio Castagnino Ugolotti, Matthew Warham, Garrett Goto, Adam Sachs, Miguel Castellanos, Andrew Steinkruger, Gracie White, Sara Orofino, Chase Brewster, Nathaniel Buroola, Peyton Moore, Ruben Sanchez Ramirez, Elliott Matthews, Dylan Glave, Anastasia Kunz, Caitlin Manley, Ian Brunjes, Jenna Wisniewski, Taylor Lockmann, Cristina Robinson, Meghna Rao, Logan Ossentjuk, Sarah Lam, Eleri Griffiths*, Heather Luedke*, Tatiana Bok*, Anne Youngdahl*, Elizabeth Braun*

Publications

1. 1980 Gaines, S.D. Resistance to herbivory in *Iridaea cordata*. American Zoologist 20:808-10.
2. 1981 Sousa, W.P., S.C. Schroeter, & S.D. Gaines. Latitudinal variation in intertidal algal community structure: the influence of grazing and vegetative propagation. Oecologia 48:297-307.
3. 1981 Lubchenco, J. & S.D. Gaines. A unified approach to marine plant-herbivore interactions. I. populations and communities. Annual Review of Ecology and Systematics. 12:405-437.

4. 1982 Gaines, S.D. & J. Lubchenco. A unified approach to marine plant-herbivore interactions. II. biogeography. *Annual Review of Ecology and Systematics*. 13:111-138.
5. 1984 Hay, M. & S.D. Gaines. Biogeographic differences in herbivore impact: do Pacific herbivores prevent Caribbean seaweeds from colonizing via the Panama Canal? *Biotropica* 16:24-30.
6. 1984 Roughgarden, J., S.D. Gaines, & Y. Iwasa. Dynamics and evolution of marine populations with pelagic larval dispersal. In: R. M. May (ed) *Exploitation of Marine Communities*. Springer-Verlag, Berlin. pp. 111-128.
7. 1984 Lubchenco, J., B. Menge, L. Ashkenas, P. Lubchenco, S. Garrity, S.D. Gaines, R. Emlet, J. Lucas, & S. Strauss. Patterns of community structure and the physical environment in a tropical intertidal community. *Journal of Experimental Marine Biology and Ecology*. 77:23-73.
8. 1985 Gaines, S.D. Herbivory and between-habitat diversity: the differential effectiveness of defenses in a marine plant. *Ecology* 66:473-485.
9. 1985 Gaines, S.D. & J. Roughgarden. Larval settlement rate: a leading determinant of structure in an ecological community of the rocky intertidal zone. *Proceedings of the National Academy of Sciences*. 82:3707-3711.
10. 1985 Gaines, S.D., S. Brown, & J. Roughgarden. Spatial variation in larval concentrations as a cause of spatial variation in settlement in the barnacle, *Balanus glandula*. *Oecologia*. 67:267-272.
11. 1986 Robertson, D.R. & S.D. Gaines. Interference competition structures habitat use in a local assemblage of coral reef surgeonfishes. *Ecology*. 67:1372-1383.
12. 1986 Menge, B., J. Lubchenco, L. Ashkenas, & S.D. Gaines. A test of the Menge-Sutherland model of community organization in a tropical rocky intertidal food web. *Oecologia*. 71:75-89.
13. 1987 Gaines, S.D. & J. Roughgarden. Fish in offshore kelp forests affect recruitment to intertidal barnacle populations. *Science*. 235:479-481.
14. 1987 Roughgarden, J., S.D. Gaines, & S. Pacala. Supply side ecology: the role of physical transport processes. in P. Giller and J. Gee (eds.) *Organization of Communities: Past and Present*. Proceedings of the British Ecological Society Symposium, Aberystwyth, Wales (April 1986). Blackwell Scientific Publications. London
15. 1987 Roughgarden, J. & S.D. Gaines. Ecology of marine populations. Chapter 18 in *Physiological Responses of Marine Organisms to Environmental Stressors*.
16. 1988 Roughgarden, J., S.D. Gaines, & H. Possingham. Recruitment Dynamics in complex life cycles. *Science*. 241:1460-1466.
17. 1989 Rice, W.R., & S.D. Gaines. The analysis of variance with unequal variances. *Proceedings of the National Academy of Sciences*. 86:8183-8184.
18. 1990 Denny, M., & S.D. Gaines. On the prediction of maximum intertidal wave forces. *Limnology and Oceanography*. 35:1-15.
19. 1990 Gaines, S.D. & W.R. Rice. Analysis of biological data with ordered expectations. *American Naturalist*. 135:310-317.

20. 1991 Yund, P., S.D. Gaines, & M. Bertness. Cylindrical tube traps for sampling larvae. *Limnology and Oceanography*. 36:1167-1177
21. 1991 Bertness, M., S.D. Gaines, D. Bermudez, & E. Sanford. Extreme spatial variation in the growth and reproductive output of the acorn barnacle *Semibalanus balanoides*. *Marine Ecology Progress Series*. 75:91-100.
22. 1992 Bertness, M., S.D. Gaines, E. Stephens, & P. Yund. Components of recruitment in populations of the acorn barnacle, *Semibalanus balanoides*. *Journal of Experimental Marine Biology and Ecology*. 156:199-215.
23. 1992 Gaines, S. D. & M. Bertness. Dispersal of juveniles and variable recruitment in sessile marine species. *Nature*. 360:579-580.
24. 1993 Bertness, M. & S.D. Gaines. Larval dispersal and local adaptation in acorn barnacles. *Evolution*. 47:316-320.
25. 1993 Gaines, S.D. & M. Denny. The largest, smallest, highest, lowest, longest, and shortest: Extremes in ecology. *Ecology*. 74:1677-1692.
26. 1993 Rice, W. R. & S.D. Gaines. Calculating P-values for ANOVA with unequal variances. *Journal of Statistical Computation and Simulation*. 46:19-22.
27. 1993 Gaines, S. D. & M. Bertness. The dynamics of juvenile dispersal: Why field ecologists must integrate. *Ecology*. 74:2430-2435.
28. 1994 Rice, W.R. & S.D. Gaines. Extending nondirectional heterogeneity tests to evaluate simply ordered alternative hypotheses. *Proceedings of the National Academy of Sciences*. 91:225-226.
29. 1994 Rice, W. R. & S. D. Gaines. Heads I win, tails you lose: testing directional alternative hypotheses in ecological and evolutionary research. *Trends in Ecology and Evolution*. 9:235-237.
30. 1994 Sanford, E. D. Bermudez, M. Bertness, & S. D. Gaines. Flow, food supply, and the population dynamics of acorn barnacles. *Marine Ecology Progress Series*. 104:49-62.
31. 1994 Rice, W.R. & S.D. Gaines. The ordered-heterogeneity test. *Biometrics*. 50:1-7.
32. 1994 Gaines, S. D. and M. Bertness. Does variable transport generate variable settlement in coastal and estuarine species? in Changes in Fluxes in Estuaries, K. Dyer & R. Orth (eds.). Olsen and Olsen, London. 315-322.
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