CURRICULUM VITAE

Peggy Fong

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EDUCATION
Ph.D. 1991 University of California, Davis and San Diego State University (Ecology).
M.S. 1986 San Diego State University (Ecology).
B.S 1978 Marquette University, Wisconsin (Biology).

POSITIONS HELD
Professor, Dept. of Ecology and Evolutionary Biology, University of California, Los Angeles, 2008-present
Associate Professor, Dept. of Ecology and Evolutionary Biology, University of California, Los Angeles, 2002-2008
Assistant Professor, Dept. of Organismic Biology, Ecology, and Evolution, University of California, Los Angeles, 1995-2002
Assistant Research Professor, San Diego State University, San Diego, 1994-995
The Rosenstiel Postdoctoral Fellow, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL, 1992- 1994.

CURRENT FELLOWSHIPS AND GRANT SUPPORT
2010-2012 State Water Quality Control Board/ SCCWRP ($189,2500) (Single PI)
2007-2012 NSF COSEE-West community based ocean sciences education $194,494 (single PI)
2007-2011 USEPA/Regional Water Quality Control Board/ SCCWRP ($188,000) (Single PI)
2005-2011 National Science Foundation, Biological Oceanography ($1,100,000) (co-PI with P.W. Glynn, University of Miami)
1999-2004 USEPA/ Ecological Indicators Program ($399,335) (single PI)
1999-2001 Santa Monica Bay Restoration Foundation ($75,000) (single PI)
1999-2001 EPA/ STAR Fellowship, Student support for Ph.D. research. ($19,405)
2000-2002 EPA/ STAR Fellowship, Student support for Ph.D. research. ($19,405)

AWARDS AND HONORS
Cum laude, Marquette University, 1978.
National Oceanographic & Atmospheric Ass.'s Best Graduate Research Award, 1986.
American Society of Limnology and Oceanography's Best Student Poster Award, 1987.
California Sea Grant Research Fellowship, 1990.

The Rosenstiel Research Associate Award at University of Miami's Rosenstiel School of Marine and Atmospheric Science, 1992-1994.
1998 Faculty Teaching Award, Department of Biology, UCLA.
Career Development Award, 1998-1999.
2001 Faculty Teaching Award, Department of Biology, UCLA.
President, California Estuarine Research Society (2009-present)
Member, Governing Board, Estuarine Research Federation (2009-present)
UCLA's Distinguished Teaching Award for Mentoring Undergraduates in Research 2008

PUBLICATIONS

* denotes co-authors that are/were my PhD students
** denotes undergraduate co-authors

IN PREP

Fong, P. and Wartian*, M. In revision. Environmental stress changes the relative importance of top-down (herbivorous fishes) and bottom-up (nutrients) forces regulating community structure and resilience of coral reefs. Oecologia.

Green*, L. and P Fong. In prep. Macroalgal mats drive positive upward trophic cascades in estuaries. MEPS

Green*, L. Blumstein, D, and P Fong. In prep. Upward cascades from macroalgal blooms enhance foraging success in generalist but not specialist shorebirds. Biological Conservation.

Green*, L. and P. Fong. In prep. Macroalgal mats drive shifts in the abundance and composition of estuarine mudflat faunal and microphytobenthic communities via accumulation of hydrogen sulfide. Oikos

Sutula, M., Green*, L., Cicchetti, G, Detenbeck, N., and Fong P. In prep. Thresholds of adverse effects of macroalgal abudacne and seiment organic matter on benthic habitat quality in estuarine intertidal flats. Estuaries and Coasts.

Bower**, J.T., K.T. Coffey**, C.A. Neumann**, S. Kappus*, and P. Fong. In review. Nutrients stimulated growth and herbivory on coral reef algal turfs even when protected by high sediment levels. Coral Reefs.

IN REVIEW

Kennison*, R.L. and P. Fong. In review. Extreme eutrophication in shallow estuaries and lagoons of California is driven by local watershed modification rather than seasonal or climactic variability. Estuaries and Coasts Special Issue.

Kane*, T.L., Capone, D.G., Fong P. In review. Freshwater pulses from seasonal precipitation enhance sediment nitrogen fixation in a eutropthic mediterranean-type estuary. MEPS.

Fraizer**, N M., Thompkins-Cook**, C, Muthukrisnan* R, Fong, C., Fong P. In review. Size does matter: Experimental partitioning of the strength of fish herbivory. MEPS

Bryson*, S and P. Fong. In review. Community-dependent associational resistance in a kelp canopy. MEPS.

Elmasri** O.L., Hensley**, N.M., Slaughter**, E.I., Kappus*, S., and P. Fong. In review. Two species of *Halimeda,* a calcifying genus of tropical macroalgae, are robust to epiphytism by cyanobacteria. JEMBE

Green*, L., Sutula, M, and Fong, P. In review. How much is too much? Identifying benchmarks of adverse effects of macroalgae on the macrobenthic community in estuarine intertidal flats. J. of Applied Ecology.

PUBLISHED

Chan**, A.A.Y, Lubarsky**, K., Judy**, K. and **P. Fong**. 2012. Nutrient addition increases consumption rates across a range of tropical algae. MEPS 465: 25-31.

Kennison*, R. L., K. Kamer*, and **P. Fong**. 2011. Rapid nitrate uptake rates and large short term storage capacities may explain why opportunistic green macroalgae dominate shallow eutrophic estuaries. Journal of Phycology 47: 483-494.

McGlathery, K., Sundback, K., and **P. Fong**. In press. Estuarine Benthic Algae. Chapter 8 IN: Estuarine Ecology. John Day (ed), Springer.

P. Fong and V.J. Paul. 2011. Coral reef algae. IN: Coral Reefs: An Ecosystem in Transition. Z. Dubinsky and N.Stambler (eds), Springer. Pgs 241-272. DOI 10.1007/978-94-007-0114-4_17

Juhasz**, A., E. Ho**, E. Bender, and **P. Fong**. 2010. Does use of tropical beaches by tourists and island residents result in damage to fringing coral reefs? A case study in Moorea French Polynesia. Marine Pollution Bulletin 60: 2251-2256. DOI: 10.1016/j.marpolbul.2010.08.011.

Smith, T.B., **P. Fong**, R. Kennison*, and J. Smith*. 2010. Spatial refuges and associational defenses promote harmful blooms of the alga *Caulerpa sertularioides* onto coral reefs. Oikos 164: 1039-1048. DOI 10.1007/s00442-010-1698-x

P. Fong and R. L. Kennison*. 2010. Phase Shifts, Alternative Stable States, and the Status of Southern California Lagoons. IN: Coastal Lagoons: Critical Habitats of Environmental Change. Michael J. Kennish and Hans W. Pearl (eds) CrC Press, New York. pp 227-251.

Armitage*, A.R., Gonzalez**, V., and **P. Fong**. 2009. Decoupling of nutrient and grazer impacts on a benthic estuarine diatom assemblage. Estuarine and Coastal Shelf Science 84: 375-382

Smith*, J.R., **P. Fong**, and R.F. Ambrose. 2009. Spatial patterns in recruitment and growth of the mussel *Mytilus californianus* (Conrad) in southern and northern California, USA, two regions with differing oceanographic conditions. Journal of Sea Research 61: 165-173.

Fong, P. 2008. Macroalgal-dominated ecosystems. IN: Nitrogen in the Marine Environment. E. J. Carpenter and D.G Capone (eds). Academic Press.

Smith*, J.R., R.F. Ambrose, and **P. Fong**. 2008. The impacts of human visitation on mussel bed communities along the California coast: Are regulatory marine reserves effective in protecting these communities? Environmental Management 41: 599-612

Lin, D.T**. and **P. Fong**. 2008. Macroalgal bioindicators (growth, tissue N, $\delta^{15}N$) detect nutrient enrichment from shrimp farm effluent entering Opunohu Bay, Moorea, French Polynesia. Marine Pollution Bulletin 56:245-249

Lirman, D.* and **P Fong**. 2007. Is proximity to land-based sources of coral stressors an appropriate measure of risk to coral reefs? An example from the Florida Reef Tract. Marine Pollution Bulletin 54: 779-791.

Smith, J.R.*, R.F. Ambrose, and **P. Fong**. 2006. Long-term change in mussel (*Mytilus californianus* Conrad) populations along the wave-exposed coast of California. Marine Biology 149: 537-545.

Cohen, R.A.* and **P. Fong**. 2006. Using opportunistic green macroalgae as an indicator of anthropogenic influences in southern California estuaries. Ecological Applications 16: 1405-1420.

Glynn, P. W., and **P. Fong**. 2006. Patterns of reef coral recovery by the regrowth of surviving tissues following the 1997-98 El Niño warming and 2000, 2001 upwelling events in Panamá, eastern Pacific. Proceedings of the 10th International Coral Reef Symposium: 624-630.

Fong, P., Smith*, T., and Wartian*, M.. 2006. Protection by epiphytic cyanobacteria maintains shifts to macroalgal-dominated communities after the 1997-98 ENSO disturbance on coral reefs with intact herbivore populations. Ecology 87: 1162-1168.

Smith*, J.R., R.F. Ambrose, and **P. Fong.** 2006. Dramatic declines in mussel bed community diversity: Response to climate change? Ecology 87: 1153-1161

Armitage*, A.R. and **P. Fong**. 2006. Predation and physical disturbance by crabs reduce the relative impacts of nutrients in a tidal mudflat. Marine Ecology Progress Series 313:205-213.

Boyer*, K.E., **Fong, P.** 2005. Co-occurrence of habitat-modifying invertebrates: effects on structural and functional properties of a created salt marsh. Oecologia 143:619-628.

Boyer*, K.E., **Fong, P.** 2005. Macroalgal-mediated transfers of water column nitrogen to intertidal sediments and salt marsh plants. Journal of Experimental Marine Biology and Ecology 321: 59-69

Cohen*, R.A. and **P. Fong**. 2005. Experimental evidence supports the use of $\delta^{15}N$ of the opportunistic green macroalga *Enteromorpha intestinalis* to determine nitrogen sources to estuaries. J Phycology 41:287-293.

Smith*, J.R., B.J. Reed, L. Mohajerani*, and **P. Fong**. 2004. Influences of abiotic factors on the persistence of kelp habitats along the northern coast of Santa Monica Bay. Southern California Academy of Sciences Bulletin. 103: 79-92

Cohen*, R.A. and **P. Fong**. 2004. Nitrogen uptake and assimilation in *Enteromorpha intestinalis* (L.) Link (Chlorophyta): Using ^{15}N to determine preference during simultaneous pulses of nitrate and ammonium. Journal of Experimental Marine Biology and Ecology 309:67-77

Boyer*, K.E., **P. Fong**, A.R. Armitage*, and R.A. Cohen*. 2004. Elevated nutrient content of macroalgae increases rates of herbivory in coral, seagrass, and mangrove habitats. Coral Reefs 23: 530-538

Armitage*, A.R. and **P. Fong**. 2004. Upward cascading effects of nutrients: shifts in a benthic microalgal community and a negative herbivore response. Oecologia.139: 560-567.

Kamer*, K., **Fong, P.**, Kennison, R. L.* and K. Schiff. 2004. Nutrient limitation of the macroalga, *Enteromorpha intestinalis* collected along a resource gradient in a highly eutrophic estuary. Estuaries 27:201-208

Kamer*, K., **Fong, P.**, Kennison*, R.L., and K. Schiff. 2004. The relative importance of sediment and water column supplies of nutrients to the growth and tissue nutrient content of the green macroalga *Entermorpha intestinalis* along an estuarine resource gradient. Aquatic Ecology 38: 45-56.

Boyle*, K.A., **P. Fong**, and K. Kamer*. 2004. Spatial and temporal patterns in sediment and water column nutrients in an eutrophic southern California estuary. Estuaries 27: 254-267

Cohen*, R.A. and **P. Fong.** 2004. Physiological responses of a bloom-forming green macroalga to short-term change in salinity, nutrients, and light help explain its ecological success. Estuaries 27: 209-216

Armitage*, A.R. and **P. Fong**. 2004. Gastropod colonization of a created coastal wetland: potential influences of habitat suitability and dispersal ability. Restoration Ecology 12: 391 – 400

Fong, P., Fong, J. and C. Fong. 2003. Growth, nutrient storage, and release of DON by Enteromorpha intestinalis in response to pulses of nitrogen and phosphorus. Aquatic Botany 78: 83-95

Fong, **P.,** K. E. Boyer*, K. Kamer*, K. A. Boyle*. 2003. Influence of initial tissue nutrient status of tropical marine algae on response to nitrogen and phosphorus additions. Marine Ecology Progress Series 262:111-123.

Boyer*, K. E., **P. Fong**, R. R. Vance, and R. F. Ambrose. 2001. *Salicornia virginica* in a southern California saltmarsh: seasonal patterns and a nutrient enrichment experiment. Wetlands 21:315-326.

Fong, Peggy, Krista Kamer*, Katharyn E. Boyer*, Karleen A. Boyle*. 2001. Nutrient content of macroalgae with differing morphologies may indicate sources of nutrients to tropical marine systems. Marine Ecology Progress Series 220:137-152.

Kamer*, K., and **Fong, P**. 2001. Nitrogen enrichment ameliorates the negative effects of reduced salinity on the green macroalga *Enteromorpha intestinalis*. Marine Ecology Progress Series 218: 87-93.

Fong, Peggy and Peter W. Glynn. 2001. Population Abundance and Size-Structure of an Eastern Tropical Pacific Reef Coral After the 1997-98 ENSO: A Simulation Model Predicts Field Measures. Bulletin of Marine Science, 68: 1-16.

Kamer*, Krista, Karleen A. Boyle*, and **Peggy Fong**. 2001. Macroalgal bloom dynamics in a highly eutrophic southern California estuary. Estuaries 24: 623-635.

Fong, Peggy and Joy B. Zedler. 2000. Sources, Sinks, and Fluxes of Nutrients (N + P) in a Small Highly-Modified Estuary in Southern California. Urban Ecosystems 4: 125-144.

Kamer*, Krista and **Peggy Fong**. 2000. A fluctuating salinity regime mitigates the negative effects of reduced salinity on the estuarine macroalga, Enteromorpha intestinalis (L.) Link. JEMBE 254: 53-69.

Fong, Peggy and Peter W. Glynn. 2000. A regional model to predict coral population dynamics in response to El Niño-Southern Oscillation. Ecological Applications 10: 842-854.

Fong Peggy, Katharyn E. Boyer*, and Joy B. Zedler. 1998. Developing an indicator of nutrient enrichment in coastal estuaries and lagoons using tissue nitrogen content of the opportunistic alga, *Enteromorpha intestinalis* (L. Link). Journal of Experimental Marine Biology and Ecology 231: 63-79.

Fong, Peggy and Peter.W. Glynn. 1998. A dynamic size-structured population model: does disturbance keep the massive coral *Gardineroseris planulata* rare in the Eastern Pacific? Marine Biology 130: 663-674.

Lirman*, Diego and **Fong, Peggy**. 1997. Susceptibility of coral communities to storm intensity, duration, and frequency. Proceedings of the 8th International Coral Reef Symposium. 1:561-566.

Fong, Peggy, Julie S. Desmond*, and J. B. Zedler. 1997. The effect of a horn snail on *Ulva expansa* (Chlorophyta): consumer or facilitator of growth? Journal of Phycology 33: 353-359.

Fong, Peggy, Myrna Jacobson, Mark Mesher*, Diego Lirman*, and Mat Harwell**. 1997. Investigating the management potential of a seagrass model through sensitivity analysis and experiments. Ecological Applications 7: 300-315.

Lirman, Diego* and **Peggy Fong**. 1997. Patterns of damage to the branching coral *Acropora palmata* following Hurricane Andrew: damage and survivorship of hurricane-generated asexual recruits. J. of Coastal Research. 13: 67-72.

Fong, Peggy and Diego Lirman*. 1996. Hurricanes cause population expansion of the branching coral, *Acropora palmata*. Marine Ecology 16: 317-335.

Fong, Peggy, Katharyn E. Boyer*, Julie S. Desmond*, and J. B. Zedler. 1996. Salinity stress, nitrogen competition, and facilitation: what controls seasonal succession of two opportunistic green macroalgae? Journal of Experimental Marine Biology and Ecology 206: 203-221.

Lirman, Diego* and **Peggy Fong**. 1996. Sequential storms cause zone-specific damage on a reef in the northern Florida reef tract: evidence from Hurricane Andrew and the 1993 storm of the century. Florida Scientist 59: 50-64.

Lirman, Diego* and **Peggy Fong**. 1995. The effects of Hurricane Andrew and Tropical Storm Gordon on Florida reefs. Coral Reefs 14: 172.

Fong, Peggy, Theodore. C. Foin, and Joy B. Zedler. 1994. A simulation model of lagoon algal communities based on competition for nitrogen and internal storage. Ecological Monographs 64: 225-247.

Fong, Peggy, Regina M. Donohoe, and Joy B. Zedler. 1994. Nutrient concentration in tissue of the macroalga *Enteromorpha* spp. as an indicator of nutrient history: an experimental evaluation using field microcosms. Mar. Ecol. Prog. Ser. 106: 273-281.

Fong, Peggy and Diego Lirman*. 1994. Damage and initial recovery of a coral reef following Hurricane Andrew. National Geographic, Research and Exploration 10: 246-248.

Fong, Peggy and Mark Harwell. 1994. Modeling seagrass communities in tropical and subtropical bays and estuaries: a mathematical model synthesis of current hypotheses. Bulletin of Marine Science 54: 757-781.

Fong, Peggy, Joy B. Zedler, and Regina M. Donohoe. 1993. Nitrogen versus phosphorus limitation of algal biomass in shallow coastal lagoons. Limnology and Oceanography 38: 906-923.

Fong, Peggy, Regina M. Donohoe, and Joy B. Zedler. 1993. Competition with macroalgae and benthic cyanobacterial mats limits phytoplankton abundance in experimental microcosms. Marine Ecology Progress Series 100: 97-102.

Fong, Peggy and Joy B. Zedler. 1993. Temperature and light effects on the seasonal succession of algal communities in shallow coastal lagoons. J. Exp. Mar. Biol. and Ecol. 171: 259-272.

Fong, Peggy. 1992. Factors controlling algal community structure in shallow coastal lagoons: a combined modeling and experimental approach. Doctoral Dissertation, San Diego State University and University of California. 250 pgs.

Fong, Peggy, R. Rudnicki, and J. B. Zedler. 1987. Phytoplankton response to nutrient loadings: a community versus component approach, pp. 61-64. IN: Proceedings of the Society of Wetland Scientists Eight Annual Meeting, May 1987.

Rudnicki, R., **Fong, P**, and J.B. Zedler. 1987. Macroalgal response to nutrient loadings of varying N:P ratios, pp. 65-68. IN: Proceedings of the Society of Wetland Scientists Eight Annual Meeting, May 1987.

Fong, Peggy. 1986. Monitoring and manipulation of phytoplankton dynamics in a southern California estuary. Masters Thesis SDSU.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS
American Society of Limnology and Oceanography
Ecological Society of America
Estuarine Research Federation
International Society for Reef Studies
Phycological Society of America
Sigma Xi

REVIEWED MANUSCRIPTS FOR
Aquatic Botany
Botanica Marina
Biodiversity and Conservation
Coral Reefs
Ecological Applications
Ecology
Ecosystems
Estuaries and Coasts
Estuarine, Coastal and Shelf Science
Journal of Applied Ecology
Journal of Experimental Marine Biology and Ecology
Journal of Phycology
Journal of Plankton
Journal of Sea Research
Limnology and Oceanography
Marine Ecology Progress Series
Pacific Science

REVIEWED PROPOSALS FOR
Environmental Protection Agency
Georgia Seagrant

Hawaii Seagrant
Maryland Seagrant
National Science Foundation
New York Seagrant
NOAA/ Ecology of Harmful Algal Blooms Program
NOAA/ National Marine Sanctuaries Program
NOAA/ National Undersea Research Program
Puerto Rico Seagrant
Rhode Island Seagrant
Smithsonian Institute

NATIONAL COMMITTEES AND PANELS

NOAA/ National Undersea Research Program proposal review panel
Upper Newport Bay Technical Advisory Committee
EPA RTAG/ Nutrient Criteria Advisory Board
Hawaii Sea Grant Panel
California Seagrant
NSF Biological Oceanography
NSF LTER

UNIVERSITY AND DEPARTMENTAL COMMITTEES AND PANELS

Awards and University Relations
Ocean Discovery Center Advisory Board
Departmental Seminar Chair
Phytoplankton Ecologist and Conservation Biologist Search Committees
Graduate Admissions and Support (2001-2002)
Joint Task Force on Undergraduate Education in a Research Context (2003)
Strategic Planning Committee (2002-2003)
Chair, Faculty Advisory Committee for the Undergraduate Research Center-Science/ CARE, (Sept 2003 – 2009)
Undergraduate Advisor 2007-2010
Member, WASC Accreditation Committee 2007-2008
Member, Ecology and Evolutionary Biology Search Committee 2007- 2008
Vice Chair for Undergraduate Education 2007-present
Chair Curriculum Committee 2008-present
Member, GAANN Committee 2008-present
Member, Development Committee 2008-present
Interim Co Chair Fall 2010
Member, Quantitative Biology Curriculum Committee 2010- present