JOHN F. BRUNO

Curriculum Vitae

Professor 919-360-7651 (cell)

Department of Biology jbruno@unc.edu

The University of North Carolina at Chapel Hill [johnfbruno.com](http://www.johnfbruno.com)

Chapel Hill, NC 27500-3280

EDUCATION

**PhD**,Department of Ecology and Evolutionary Biology, Brown University, 2000

**MS**,Department of Biology, California State University, Northridge, 1995

**BS**, Department of Biology, Northeastern University, Boston, MA, 1991

**East/West Marine Biology Program,** Northeastern University, 1990

PROFESSIONAL APPOINTMENTS

**Professor**, Department of Biology, The University of North Carolina at Chapel Hill, 2012-

**Distinguished Visiting Scientist,** Global Change Institute, University of Queensland and CSIRO Climate Adaptation Flagship, Brisbane Australia, 2010

**Associate Professor**, Department of Marine Sciences & Department of Biology, The University of North Carolina at Chapel Hill, 2007-2012

**Assistant Professor**, Department of Marine Sciences, The University of North Carolina at Chapel Hill, 2001-2007

**Instructor**, East-West Marine Biology Program in Jamaica and Moorea, 2002-2005

**Summer Instructor**, Cornell University/Shoals Marine Laboratory, 2000-2002

**Postdoctoral Research Associate**, Section of Ecology and Evolutionary Biology, Cornell University, 2000

HONORS

Visiting Professorship, University of Sassari, Italy, 2019

Clarivate World’s most highly cited/impactful researchers list, 2017, 2018

Invited Student Symposium Speaker: Western Society of Naturalists annual meeting, 2012

“Tar Heel of the Week” Raleigh News and Observer, July 2010 [Link](http://www.newsobserver.com/2010/07/11/575187/his-mission-heal-the-oceans-before.html)

Pew Marine Conservation Fellowship Nominee, 2010

Pogue Competitive Research Leave: UNC Vice Chancellors Office, 2010

Invited Plenary Speaker: Annual Meeting of the Ecological Society of Australia, 2008

Packard Foundation Fellowship for Science and Engineering UNC-CH nominee, 2001

Joukowsky Family Foundation Outstanding Dissertation Award, 2000

Western Society of Naturalists, Best Student Paper Award, 1998

California State University, Schiffman Award for Excellence in Scientific Research, 1995

EXTERNAL FUNDING

**National Science Foundation: Biological Oceanography Panel**

The role of temperature in regulating herbivory and algal biomass in upwelling systems (PI, 2017-2021) $684,805

**Waitt Foundation:** Zombie reefs of the Caribbean (PI, 2015) $10,000

**National Science Foundation: Geomorphology**

The role of ecomorphodynamic feedbacks in barrier island response to climate change (2013-2016) 478,177 (co-PI with Laura Moore, UNC Geology)

**North Carolina Division of Marine Fisheries**

Investigating salinity fluxes on natural and restored shell bottom habitat to better predict disturbance effects driven by climate change (2013-2015) $225,963 (co-PI with J. Fodrie)

**Rufford Foundation**

Effectiveness of new fisheries regulations in Belize on restoring grazer populations and coral reef resilience (2010-2013) $60,000 (co-PI with C. Cox)

**National Science Foundation: Division of Integrative Organismal Systems**

Collaborative Research: Assessing the effect of environmental stressors on invertebrate innate immunity using a coral pathosystem (2010-2013) $683,861 (co-PI with L. Mydlarz and E. Weil)

**CSIRO Distinguished Visiting Scientist Fellowship**

Forecasting the effects of climate change on coral reefs ecosystems (2010) $15,000

**North Carolina Division of Coastal Management CRFL grant program**

Fisheries habitat impacts of marsh sills (living shorelines) as a stabilization/restoration alternative to bulkheads (2010-2011) $212,547 (co-PI with C. Peterson and R. Gittman)

**The World Bank: Environment Program**

Mapping the vulnerability of coastal marine ecosystems to anthropogenic climate change

(PI, 2009) $80,000

**National Science Foundation: Biological Oceanography Panel**

Lionfish invasion of the Mesoamerican reef: community invasibility and the evolutionary response of prey avoidance behavior to a novel predator (PI, 2009-2010) $133,052

**National Geographic Society**

The efficacy of marine reserves on the Mesoamerican Reef in conserving reef-building corals (PI, 2008-2009) $13,378

**National Science Foundation: Biological Oceanography Panel**

Cascading effects of predator diversity in a marine food web (PI, 2006-2009) $349,927

**NOAA Coral Reef Conservation Program**

Improving the effectiveness of coral MPAs through the analysis and synthesis of global coral thermal stress and decline (2006-2008) $60,000 (PI, with K. Casey)

**North Carolina Sea Grant**

Linking biodiversity to the survival of native oyster beds and their associated faunal assemblages (co-PI with Nessa O’Connor, 2005) $4,645

**National Science Foundation: Biological Oceanography Panel**

Biodiversity and ecosystem functioning in plant-grazer systems: Experimental tests in a marine benthic community (2003-2006) $470,000 (PI, with J.E. Duffy)

**National Science Foundation: Ecology of Infectious Disease Panel**

Origins and spread of the Aspergillus-Gorgonian coral epizootic: Role of climate and

environmental facilitators (2003-2006) $1,728,000 (co-PI with C.D. Harvell, S. Ellner, and G. Smith)

**PADI Foundation**

Environmental control and demographic effects of coral disease epidemics $2,400

**National Science Foundation: Population Biology Panel**

Metapopulation dynamics of the New England cobble beach plant community

(PI, 2001-2004) $138,000

**NOAA, Sanctuaries and Reserves Division, Fellowship Award**

The ecology of New England cobble beach plant communities: An investigation of the factors dictating community distribution (1998-2000) $50,000

**National Science Foundation Dissertation Improvement Award**

Mechanisms of community facilitation and metapopulation dynamics of New England cobble beach plants (1998-2000) $4,500

REFEREED PUBLICATIONS

\*graduate student co-author, †undergraduate student co-author

Bruno, J.F., I.M. Côte, and L.T. Toth. 2018. Climate change, coral loss, and the curious case of the parrotfish paradigm: Why don't MPAs improve reef resilience? Annual Review of Marine Science *In Press*

Gin, L.E. †, A. Rowland\*, B. Steinwand, J. Bruno,L. A. Corwin. 2018. Students who fail to achieve pre-defined research goals may still experience numerous positive outcomes as a result of CURE participation. CBE—Life Sciences Education *In Press*

Carr, L.A.\* , R.K.\* Gittman and J.F. Bruno. 2018. Temperature influences herbivory and algal biomass in the Galápagos Islands. Frontiers in Marine Science 5:279 doi:10.3389/fmars.2018.00279

Bruno, J. F., A. E. Bates, C. Cacciapaglia, E. P. Pike, S. Amstrup, R. van Hooidonk, S. A. Henson, and R. B. Aronson. 2018. Climate change threatens the world's marine protected areas. Nature Climate Change doi:10.1038/s41558-018-0149-2

Bruno, J. F., W. Saumweber, L. B. Crowder, L. Pendleton, S. E. Roady, T. Rouleau, M. Sakashita. 2018. Safe harbors: The many benefits of marine sanctuaries and monuments. Frontiers in Marine Science 5:189 doi:10.3389/fmars.2018.00189

Eddy, T. D., W. W. L., Cheung, and J. F. Bruno. 2018. Historical baselines of coral cover on tropical reefs as estimated by expert opinion. PeerJ 6, e4308. doi:10.7717/peerj.4308.

Bruno, J. F., T. A. Rand, N. C. Emery, and M. D. Bertness. 2017. Facilitative and competitive interaction components among New England salt marsh plants. PeerJ 5, e4049. doi:10.7717/peerj.4049

Allen, K. A., J.F. Bruno, F. Chong, D. Clancy, T.R. McClanahan, M. Spencer, and K. Zychaluk. 2017. Among-site variability in the stochastic dynamics of East African coral reefs. PeerJ 5:e3290 [doi.org/10.7717/peerj.3290](https://doi.org/10.7717/peerj.3290)

Hackerott, S.\*, A. Valdivia\*, C.E. Cox\*, N.J. Silbiger\*, and J.F. Bruno. 2017. Invasive lionfish had no measurable effect on prey fish community structure across the Belizean Barrier Reef. PeerJ 5:e3270. [doi.org/10.7717/peerj.3270](https://doi.org/10.7717/peerj.3270)

Valdivia, A.\*, C.E. Cox\* and J.F. Bruno. 2017. Predatory fish depletion and recovery potential on Caribbean reefs. Science Advances 3:e1601303 doi.org/10.1126/sciadv.1601303

Cox, C.E. \*, A. Valdivia\*, and M. McField, K. Castillo, and J.F. Bruno. 2017. Establishment of marine protected areas alone has not restored coral reef communities in Belize. Marine Ecology Progress Series 563: 65-79 doi.org/10.3354/meps11984

Bruno, J.F. and A. Valdivia\*. 2016. Coral reef degradation is not associated with local human population density. Nature Scientific Reports doi.org/10.1038/srep29778

Anton, A. \*, K. Cure, C.A. Layman, R. Puntila, M.S. Simpson†, and J.F. Bruno. 2016. Prey naiveté to invasive lionfish (*Pterois volitans*). Marine Ecology Progress Series 544:257-269 doi.org/10.3354/meps11553

Bulleri, F, J.F. Bruno, B.R. Silliman, J.J Stachowicz. 2016. Facilitation and the niche: implications for coexistence, range shifts and functioning in marine ecosystems. Functional Ecology 30:70-78 doi.org/10.1111/1365-2435.12528

Bruno, J.F., L.A. Carr\*, and M.I. O,Connor. 2015. Marine Metabolic Ecology: Exploring the role of temperature in the ocean through metabolic scaling. Ecology 96:3126-3140 doi.org/10.1890/14-1954.1

Gittman, R.K.\*, C.H. Peterson, C. Currin, F.J. Fodrie, M.F. Piehler, and J.F. Bruno. 2015. Living shorelines can enhance the nursery role of estuarine habitats. Ecological Applications doi.org/10.1890/14-0716.1

Gittman, R.K.\*, A.M. Popowich, D.A. Keller, J.F. Bruno, C.A. Currin, C.H. Peterson, M.F. Piehler. 2015. Engineering away our natural defenses: An analysis of shoreline hardening in the United States. Frontier in Ecology and the Environment 13: 301-306 doi.org/10.1890/150065

Bruno, J.F. 2015. The coral disease triangle. Nature Climate Change 5:302–303 [doi.org/10.1038/nclimate2571](http://doi.org/10.1038/nclimate2571)

Cooper, J. \*, M. Spencer, and J.F. Bruno. 2015. Stochastic dynamics of a warmer Great Barrier Reef. Ecology 96(7):1802-1811 <http://dx.doi.org/10.1890/14-0112.1>

Castillo, K.D., J. B. Ries, J.F. Bruno, I.T. Westfield\*. 2014. The reef-building coral *Siderastrea siderea* exhibits parabolic responses to ocean acidification and warming. Proceedings Roy Acad B 281: 20141856 [doi.org/10.1098/rspb.2014.1856](http://doi.org/10.1098/rspb.2014.1856)

Gittman, R.K. \*, A.M. Popowich, J.F. Bruno, and C.H. Peterson. 2014. Marshes with and without sills protect estuarine shorelines from erosion better than bulkheads during a Category 1 Hurricane. Ocean & Coastal Management 102:94e102 [doi.org/10.1016/j.ocecoaman.2014.09.016](http://doi.org/10.1016/j.ocecoaman.2014.09.016)

O’Connor, M. I., J. M. Holding, C. V. Kappel, C. M. Duarte, K. Brander, C. J. Brown, J. F. Bruno, L. Buckley, M. T. Burrows, B. S. Halpern, W. Kiessling, P. Moore, J. M. Pandolfi, C. Parmesan, E. S. Poloczanska, D. S. Schoeman, W. J. Sydeman, and A. J. Richardson. 2014. Strengthening confidence in climate change impact science. Global Ecology and Biogeography 102: [doi.org/10.1111/geb.12218](http://doi.org/10.1111/geb.12218)

Bruno. J.F. 2014. How do coral reefs recover? Science 6119:879-880 [doi.org/10.1126/science.1258556](http://doi.org/10.1126/science.1258556)

He,Qiang, M.D. Bertness, J.F. Bruno, B. Li, G. Chen, T.C. Coverdale†, A.H. Altieri, J. Bai, T. Sun, S.C. Pennings, J. Liu, P.R. Ehrlich, B. Cui. 2014. Economic development and coastal ecosystem change in China. Nature Scientific Reports 4: 5995 [doi.org/10.1038/srep05995](http://doi.org/10.1038/srep05995)

DelVecchia, A.G.†, J.F. Bruno, L. Benninger, M. Alperin, O. Banerjee†, J. de Dios Morales†.. 2014. Organic carbon inventories in natural and restored Ecuadorian mangrove forests. [PeerJ 2:e388](https://peerj.com/articles/388/)

Valdivia A.\*, Bruno J.F., Cox C.E.\*, Hackerott S.\*, Green S.J.\* 2014. Re-examining the relationship between invasive lionfish and native grouper in the Caribbean. [PeerJ 2:e348](https://peerj.com/articles/348/)

Zhang, S.Y.†, K.E. Speare†, Z.T. Long, K.A. McKeever†, M. Gyoerkoe†, A.P. Ramus†, Z. Mohorn†, K.L. Akins†, S.M. Hambridge†, N.A.J. Graham, K.L. Nash†, E.R. Selig, J.F. Bruno. 2014. Relationships between richness and stability in coral reef communities. [PeerJ 2:e308](https://peerj.com/articles/308/)

Thomsen, M.S., T. Wernberg, J.D. Olden J.E. Byers, J.F. Bruno, B.R. Silliman, D.R. Schiel. 2014. Forty years of experiments on aquatic invasive species: are study biases limiting our understanding of impacts? NeoBiota 22:1-22 [doi.org/10.3897/neobiota.22.6224](http://doi.org/10.3897/neobiota.22.6224)

Burrows, M. T., D. S. Schoeman, A. J. Richardson, J. G. Molinos, A. Hoffmann, L. B. Buckley, P. J. Moore, C. J. Brown, J. F. Bruno, C. M. Duarte, B. S. Halpern, O. Hoegh-Guldberg, C. V. Kappel, W. Kiessling, M. I. O’Connor, J. M. Pandolfi, C. Parmesan, W. J. Sydeman, S. Ferrier, K. J. Williams, and E. S. Poloczanska. 2014. Geographical limits to species-range shifts are suggested by climate velocity. Nature 507: 492-495 <http://doi.org/10.1038/nature12976>

Bruno. J.F., W.F. Precht, P.S. Vroom and R.B. Aronson. 2014. Coral reef baselines: how much macroalgae is natural? Marine Pollution Bulletin 80:24-29 [doi.org/10.1016/j.marpolbul.2014.01.010](http://doi.org/10.1016/j.marpolbul.2014.01.010)

Lee, S.C.\* and J.F. Bruno. 2014. Propagule supply limits grazer richness equally across a resource gradient. Ecosphere 1:8 doi.org/10.1890/ES13-00152.1

Thomsen, M.S., J.E. Byers, D.R. Schiel, J.F. Bruno, J.D. Olden, T. Wernberg, and B.R. Silliman. 2013. Impacts of marine invaders on biodiversity depend on trophic position and functional similarity. Marine Ecology Progress Series 495: 39–47 [doi.org/10.3354/meps10566](http://doi.org/10.3354/meps10566)

Poloczanska, E.S., C.J. Brown, W.J. Sydeman,W. Kiessling, D.S. Schoeman, P.J. Moore, K. Brander, J.F. Bruno, L.B. Buckley, M.T. Burrows, C.M. Duarte, B.S. Halpern, J. Holding, C.V. Kappel, M.I. O’Connor, J.M. Pandolfi, C.Parmesan, F. Schwing, S.A. Thompson, and A.J. Richardson. 2013. Global imprint of climate change on marine life. Nature Climate Change [doi.org/10.1038/nclimate1958](http://doi.org/10.1038/nclimate1958)

Bruno, J.F. 2013. Building a better crystal ball. Current Biology

[doi.org/10.1016/j.cub.2013.04.042](http://doi.org/10.1016/j.cub.2013.04.042)

Carr, L.A.\* and J.F. Bruno. 2013. Warming increases the top-down effects and metabolism of a subtidal herbivore. PeerJ 1:e109 [doi.org/10.7717/peerj.109](http://doi.org/10.7717/peerj.109)

Hackerott, S.†, A. Valdivia\*, S.J. Green\*, I.M. Côté, C.E. Cox\*, L. Akins, C.A. Layman, W.F. Precht, and J.F. Bruno. 2013. Native predators do not influence invasion success of Pacific lionfish on Caribbean reefs. PLoS One 8(7): e68259 [doi.org/10.1371/journal.pone.0068259](http://doi.org/10.1371/journal.pone.0068259)

Stat, M., X. Pochon, E. Franklin, J Bruno, K. Casey, L. Selig, R. Gates. 2013. Symbiodinium clade D correlates with a high cumulative frequency of thermal stress in Montipora but not Porites in Hawaii. Ecology and Evolution [doi.org/10.1002/ece3.556](http://doi.org/10.1002/ece3.556)

Reynolds, P.L.\* and J.F. Bruno. 2013. Multiple predator species alter prey behavior, population growth and a trophic cascade in a model estuarine food web. Ecological Monographs 83: 119-132

Carr, L.A.\*, A.C. Stier\*, K. Fietz†, I. Montero†, A.J. Gallagher\* and J.F. Bruno.2013. Illegal shark fishing in the Galapagos marine reserve. Marine Policy 39: 317-321 [doi.org/10.1016/j.marpol.2012.12.005](http://doi.org/10.1016/j.marpol.2012.12.005)

Cox, C.E.\*, C.D. Jones, J.P. Wares, K.D. Castillo, and J.F. Bruno. 2012. Fish mislabeling in Belize: Implications for coral reef conservation. Conservation Letters [doi.org/10.1111/j.1755-263X.2012.00286.x](http://doi.org/10.1111/j.1755-263X.2012.00286.x)

Heard, M.J.\*, D.F. Sax and J.F. Bruno. 2012.Dominance of non-native species increases over time in a historically invaded strandline community. Diversity and Distributions 18(12): 1232-1242

Pryzant L.K.† and J.F. Bruno. 2012. What to do when the oceans rise. PLoS Biology

[10(9): e1001387](http://www.plosbiology.org/article/info%3Adoi/10.1371/journal.pbio.1001387) (Book review)

Reynolds, P.L.\* and J.F. Bruno. 2012. Effects of trophic skewing of species richness on ecosystem functioning in a diverse marine community. PLoS One 7:5 e36196

Long, Z.T., M.I. O’Connor\* and J.F. Bruno. 2012. Effects of predation and intraspecific aggregation on prey diversity at multiple spatial scales. J. Exp. Mar. Biol. Ecol. 416: 115-120

Selig, E.R.\*, K.S.Casey and J.F. Bruno. 2012. Temperature-driven coral decline: the role of marine protected areas. Global Change Biology 18:5 1561-1570

Żychaluk, K, J.F. Bruno, D. Clancy, T.R. McClanahan and M. Spencer. 2012. Modeling regional coral-reef dynamics without mechanistic assumptions. Ecology Letters 15:151–158

Burrows, M.T., D.S. Schoeman, L.B. Buckley, P. Moore,E.S. Poloczanska,K.M. Brander,C. Brown,J.F. Bruno,C.M. Duarte,B.S. Halpern,J. Holding,C.V. Kappel,W. Kiessling, M.I. O’Connor,J.M. Pandolfi, C. Parmesan, F.B. Schwing,W.J. Sydeman and A.J. Richardson. 2011. The pace of shifting climate in marine and terrestrial ecosystems. Science 334:652-655

Lowe, P.K.†, J.F. Bruno, E.R. Selig and M. Spencer. 2011. Empirical models of transitions between coral reef states: effects of regions, marine protected areas, and environmental change scenarios. PLoS One 6(11) e26339

Hughes, T.P., D.R. Bellwood, A.H. Baird, J. Brodie, J.F. Bruno, J.M. Pandolfi. 2011. Shifting baselines, declining coral cover, and the erosion of reef resilience: comment on Sweatman et al. (2011). Coral Reefs 30: 653-660

Brander, K., J. Bruno, A. Hobday and D. Schoeman. 2011. The value of attribution. Nature Climate Change. 1: 70-71

Long, Z.T., J.F. Bruno and J.E. Duffy. 2011. Food chain length and omnivory determine the stability of a marine subtidal food web. J. Animal Ecology 80: 586-594

Bruno, J.F., S.P. Ellner, I. Vu†, K. Kim, and C.D. Harvell. 2011. Impacts of aspergillosis on sea fan coral demography: modeling a moving target. Ecological Monographs 81: 123-139

Kiers, T.E., T.M. Palmer, A R. Ives, J.F. Bruno, and J.L. Bronstein. 2010. Mutualisms in a changing world: an evolutionary perspective. Ecology Letters 13: 1459-1474

Dudgeon, S.R., R.B. Aronson,J.F. Bruno and W.F. Precht. 2010. Phase shifts and stable states on coral reefs. Marine Ecology Progress Series 413: 201-216

Mcleod E., R. Moffitt, A. Timmermann, R. Salm, L. Menviel, M.J. Palmer, E.R. Selig, K.S. Casey and J.F. Bruno 2010. Warming seas in the coral triangle: coral reef vulnerability and management implications. Coastal Management 38: 518-539

Moran, E. R.†, P.L. Reynolds\*, L.M. Ladwig, M.I. O’Connor\*, Z.T. Long, and J.F. Bruno. 2010. Predation intensity is negatively related to plant species richness in a benthic marine community. Marine Ecology Progress Series 400:277-282

Hoegh-Guldberg, O. and J.F. Bruno. 2010.Impacts of climate change on the world's marine ecosystems. Science 328:1523-1528

Butchart, S.H.M., M. Walpole, R. Almond, B. Bombard, J.F. Bruno, et al. 2010. Global biodiversity: indicators of recent declines. Science 238:1164-1168

Selig, E.R. \*, K.S. Casey, and J.F. Bruno. 2010. New insights into global patterns of ocean temperature anomalies: implications for coral reef health and management. Global Ecology and Biogeography 19:397-411

Schutte, V.G.W. †, E.R. Selig\*and J.F. Bruno. 2010. Regional spatio-temporal trends in Caribbean coral reef benthic communities. Marine Ecology Progress Series 402: 115-122

Selig, E.R.\* and J.F. Bruno. 2010. A global analysis of the effects of marine protected areas on coral loss. PLoS One 5:e9278

O’Connor, M.I., M.F. Piehler, D. Leech, A. Antonand J.F. Bruno. 2009. Warming and resource availability shift food web structure and metabolism. PLoS Biology 7:e1000178

Bruno, J.F., H. Sweatman, W.F. Precht, E.R. Selig\* and V.G.W. Schutte†. 2009. Assessing evidence of phase shifts from coral to macroalgal dominance on coral reefs. Ecology 90:1478-1484

O’Connor, M.I.\* and J.F. Bruno. 2009. Predator richness has no effect in a diverse marine food web. J. Animal Ecology 78:732-740

Boyer, K.E., J.S. Kertesz\* and J.F. Bruno. 2009. Environmental context influences the effects of species richness on productivity but not stability of marine macroalgal communities. Oikos 118: 1062-1072

Lee, S.C.\* and J.F. Bruno. 2009. Propagule supply controls grazer community structure and primary production in a benthic marine ecosystem. Proceedings of the National Academy of Sciences, USA 106: 7052–7057

Selkoe, K.A., B.H. Halpern, C. Ebert, E. Franklin, E. Selig\*, K. Casey, J. Bruno, and R.J. Toonen. 2009. A map of cumulative impacts to a “pristine” coral reef ecosystem, the Papahānaumokuākea Marine National Monument. Coral Reefs 28:635–650

Vu, I†., G. Smelick, S†. Harris†, S.C. Lee\*, E. Weil, R.F. Whitehead and J.F. Bruno. 2009. Macroalgae has no effect on the severity and dynamics of Caribbean yellow band disease. PLoS One 4(2): e4514

Bruno, J.F., and B.J. Cardinale. 2008. Cascading effects of predator richness. Frontiers in Ecology and the Environment 6:539-546

Bruno, J.F., K.E. Boyer, J.E. Duffy and S.C. Lee\*. 2008. Relative and interactive effects of plant and grazer richness in a benthic marine community. Ecology 89:2518-2528

Halpern, B.S., C.V. Kappel, F. Micheli, Selkoe, K.A., C. D’Agrosa, J.F. Bruno, K.S. Casey, C. Ebert, H.E. Fox, R. Fujita, D. Heinemann, H.S. Lenihan, E.M.P. Madin, M. Perry, E.R. Selig\*, M. Spalding, R. Steneck, S. Walbridge, R. Watson. 2008. Response to “Southern ocean not so pristine” and “Diminishing sea ice” Science 321:1444-1445 (Letter to the editor)

Selkoe, K.A., C.V. Kappel, B.S. Halpern, F. Micheli, C. D’Agrosa, J.F. Bruno, K.S. Casey, C. Ebert, H.E. Fox, R. Fujita, D. Heinemann, H.S. Lenihan, E.M.P. Madin, M. Perry, E.R. Selig\*, M. Spalding, R. Steneck, S. Walbridge, R. Watson. 2008. Response to comment on “A global map of human impact on marine ecosystems” Science 321:1446c (Technical comment)

Bulleri, F., J.F. Bruno, and L. Benedetti-Cecchi. 2008. Beyond competition: incorporating positive interactions between species to predict ecosystem invasibility. PLoS Biology 6: e162

Douglas, J.G.\*, J.E. Duffy and J.F. Bruno. 2008. Herbivore and predator diversity interactively affect ecosystem properties in experimental marine communities. Ecology Letters 11: 598-608

Halpern, B.S., S. Walbridge, K.A. Selkoe, C.V. Kappel, F. Micheli, C. D’Agrosa, J.F. Bruno, K.S. Casey, C. Ebert, H.E. Fox, R. Fujita, D. Heinemann, H.S. Lenihan, E.M.P. Madin, M. Perry, E.R. Selig\*, M. Spalding, R. Steneck, R. Watson. 2008. Assessing and mapping the global impact of human activities on marine ecosystems. Science 319:948-952

O’Connor. N.E., J.H. Grabowski, L.M. Ladwig, and J.F. Bruno. 2008. Simulated predator extinctions: predator identity affects the survival and settlement of oysters. Ecology 89:428-438

O’Connor. N.E. and J.F. Bruno. 2007. Identity of predator functional groups affects the structure and functioning of a model marine food web. Oikos 116:2027-2038

Long, Z.T., J.F. Bruno and J.E. Duffy. 2007. Biodiversity mediates functioning through different mechanisms at adjacent trophic levels. Ecology 88:2821-2829

Stachowicz, J.J., J.F. Bruno, and J.E. Duffy. 2007. Understanding the effects of marine biodiversity on communities and ecosystems. Annual Review of Ecology, Evolution, and Systematics 38:739–766

Sax, D. F., J.J. Stachowicz, J.H. Brown, J.F. Bruno, M.N. Dawson, S.D. Gaines, R.K. Grosberg, A. Hastings, R.D. Holt, M.M. Mayfield, M.I. O’Connor\*, and W.R. Rice. 2007. Ecological and evolutionary insights from species invasions. Trends in Ecology and Evolution 22:465-471

Bruno, J.F., and E.R. Selig\*. 2007. Regional decline of coral cover in the Indo-Pacific: timing, extent, and subregional comparisons. PLoS One 8:e711

Bruno, J.F., E.R. Selig\*, K.S. Casey, C.A. Page\*, B.L. Willis, C.D. Harvell, H. Sweatman, and A.M. Melendy. 2007. Thermal stress and coral cover as drivers of coral disease outbreaks. PLoS Biology 5:e124

Halpern, B.S., B.R. Silliman, J.D. Olden, J.F. Bruno, and M.D. Bertness. 2007. Incorporating positive interactions in aquatic restoration and conservation. Frontiers in Ecology and the Environment 5:153-160

O’Connor, M.I.\*, J.F. Bruno, S.D. Gaines, B.S. Halpern, S.E. Lester\*, B.P. Kinlan\*, and J.M. Weiss. 2007. Temperature control of larval dispersal and the implications for marine ecology, evolution and conservation. Proceedings of the National Academy of Sciences, USA 104:1266-1271

Bruno, J.F., S.C. Lee\*, J.S. Kertesz†, R.C. Carpenter, Z.T. Long, and J.E. Duffy. 2006. Partitioning the effects of algal species identity and richness on benthic marine primary production. Oikos 115:170-178

Idjadi, J.A.\*, S.C. Lee\*, J.F. Bruno, W.F. Precht, L. Allen-Requa\*, and P.J. Edmunds. 2006. Rapid phase-shift reversal on a Jamaican coral reef. Coral Reefs 25:209-211

Ward, J.R.\*, K.L. Rypien\*, J.F. Bruno, C.D. Harvell, E. Jordán-Dahlgren, K.M. Mullen,

R.E. Rodríguez-Martínez, J. Sánchez, and G. Smith. 2006. Coral diversity and disease in Mexico. Diseases of Aquatic Organisms 69:23-31

van de Koppel, J., A.H. Altieri\*, B.R. Silliman, J.F. Bruno, and M.D. Bertness. 2006. Scale-dependent interactions and community structure on cobble beaches. Ecology Letters 9:45-50

Bruno, J.F., K.E. Boyer, J.E. Duffy, S.C. Lee\*, and J.S. Kertesz†. 2005. Effects of species identity and richness on primary production in benthic marine communities. Ecology Letters 8:1165-1174

Bruno, J.F., and M.I. O’Connor\*. 2005. Cascading effects of predator diversity and omnivory in a marine food web. Ecology Letters 8:1048-1056

Precht, W.F., S.L. Miller, R.B. Aronson, J.F. Bruno, and L. Kaufman. 2005. Reassessing U.S. coral reefs. Science 308: 1741 (Letter to the editor)

LaJeunesse, T.C., S. Lee\*, S. Bush†, and J.F. Bruno. 2004. Persistence of non-Caribbean algal symbionts in Indo-Pacific mushroom corals released to Jamaica 35 years ago. Coral Reefs 24:157-159

Edmunds, P.J., J.F. Bruno, and D.B. Carlon. 2004. Effects of depth and microhabitat on growth and survivorship of juvenile corals in the Florida Keys. Marine Ecology Progress Series 278: 115-124

Fridley, J.D., R.L. Brown\*, and J.F. Bruno. 2004. Null models of exotic invasions and scale-dependent patterns of native and exotic species richness. Ecology 85: 3215-3222

Bush, S. †, W.F. Precht, J.D. Woodley, and J.F. Bruno. 2004. Indo-Pacific mushroom corals found on Jamaican reefs. Coral Reefs 23: 234

Bruno, J.F., C.W. Kennedy†, T.A. Rand, and M.B. Grant†. 2004. Exotic invasion of a marine plant community: A landscape-scale test of some key predictions and paradigms of invasion biology. Oikos 107: 531-540

Bruno, J.F., L. Petes†, C.D. Harvell, and A. Hettinger†. 2003. Nutrient enrichment can increase the severity of two Caribbean coral diseases. Ecology Letters 6:1056-1061

Aronson, R.B., J.F. Bruno, W.F. Precht, P.W. Glynn, C.D. Harvell, L.S. Kaufman, C.S. Rogers, E.A. Shinn, and J.F. Valentine. 2003. Causes of coral reef degradation. Science 302: 1502 (Letter to the editor)

Bruno, J.F., J.J. Stachowicz, and M.D. Bertness. 2003. Inclusion of facilitation into ecological theory. Trends in Ecology and Evolution 18:119-125 (reviewed in Shouse, B. 2003. Conflict Over Cooperation. Science 299: 644-646)

Witman, J.D., S.J. Genovese, J.F. Bruno, J.W. McLaughlin, and B.I. Pavlin†. 2003. Massive prey recruitment and the control of subtidal communities on regional spatial scales. Ecological Monographs 73:441-462

Bruno, J.F. 2002. Causes of nested species distributions and landscape-scale rarity in cobble beach plant communities. Ecology 83:2304-2314

Bruno, J.F., C.E. Siddon, J.D. Witman, and P.L. Colin. 2001. El Niño-related coral bleaching in Palau, Western Caroline Islands. Coral Reefs 20:127-136

Bruno, J.F. 2000. Facilitation of cobble beach plant communities through habitat modification by *Spartina alterniflora*. Ecology 81:1179-1192

Bruno, J.F., and C.W. Kennedy. 2000. Patch-size dependent habitat modification and facilitation on New England cobble beaches by *Spartina alterniflora*. Oecologia 122:98-108

Kennedy, C.W., and J.F. Bruno. 2000. Restriction of the upper distribution of New England cobble beach plants by wave-related disturbance. J. Ecology 88:856-868

Bertness, M.D., G.H. Leonard, J.M. Levine, and J.F. Bruno. 1999. Climate-driven interactions among rocky intertidal organisms caught between a rock and a hot place. Oecologia 120:446-450

Bruno, J.F. 1998. Fragmentation in *Madracis mirabilis* (Duchassaing and Michelotti): How common is size-specific fragment survivorship in corals? J. Exp. Mar. Biol. Ecol. 230:169-181

Bruno, J.F., and P.J. Edmunds. 1998. Metabolic consequences of phenotypic plasticity in the coral *Madracis mirabilis* (Duchassaing and Michelotti): the effect of morphology and water flow on aggregate respiration. J. Exp. Mar. Biol. Ecol. 229:187-195

Bruno, J.F., and P.J. Edmunds. 1997. Clonal variation for phenotypic plasticity in the coral *Madracis mirabilis*. Ecology 78:2177-2190

Bruno, J.F., and J.D. Witman. 1996. Defense mechanisms of scleractinian cup corals against overgrowth by colonial invertebrates. Marine Ecology Progress Series 143:165-171

BOOKS AND BOOK CHAPTERS

CôtéI. M. and J. F. Bruno.Impacts of invasive species on coral reef fishes. 2015. In: Mora, C. (ed.) *Ecology and Conservation of fishes on coral reefs: The functioning of an ecosystem in a changing world.* University of Hawaii Press, Manoa, United States.

Bertness, M.D., B.R. Silliman, J.F. Bruno and J.J. Stachowicz 2013. Marine community ecology and conservation. Sinauer, Sunderland, MA

Bertness, M.D., B.R. Silliman, J.J. Stachowicz, and J.F. Bruno. 2013. A history of marine community ecology. In: Bertness, M.D., B.R. Silliman, J.F. Bruno and J.J. Stachowicz (eds.) *Marine community ecology and conservation*. Sinauer, Sunderland, MA

Bruno, J.F., C.D.G. Harley, and M.T. Burrows. 2013. Climate change and marine communities. In: Bertness, M.D., B.R. Silliman, J.F. Bruno and J.J. Stachowicz (eds.) *Marine community ecology and conservation*. Sinauer, Sunderland, MA

Duffy J.E., J.J. Stachowicz and J.F. Bruno. 2012. Multitrophic biodiversity and the responses of marine ecosystems to global change. In: Paterson et al. (eds.) *Marine biodiversity futures and ecosystem functioning: Frameworks, methodologies and integration.*  Oxford University Press, Oxford

O’Connor, M.I. and J.F. Bruno. 2012. Marine Invertebrates. In: Brown J.H., R. Sibley and A. Kodric-Brown (eds.) *Metabolic Ecology: A Scaling Approach*. Wiley and Sons, London

Selig, E.R.\*, C.D. Harvell, J.F. Bruno, B.L. Willis, C.A. Page, K.S. Casey and H. Sweatman. 2006. Analyzing the relationship between ocean temperature anomalies and coral disease outbreaks at broad spatial scales. In: J.T. Phinney, O. Hoegh-Guldberg, J. Kleypas, W. Skirving, and A. Strong (eds.) *Coral reefs and climate change: science and management*. American Geophysical Union, Washington, DC, Pages 111-128

Bruno, J.F., J.D. Fridley\*, K. Bromberg† and M.D. Bertness. 2005. Insights into biotic interactions from studies of species invasions. In: Sax, D.F., S.D. Gaines, and J.J. Stachowicz (eds.) *Species Invasions: Insights into Ecology, Evolution and Biogeography.* Sinauer, Sunderland, MA, Pages 13-40

Bruno, J.F. and M.D. Bertness. 2001. Habitat modification and facilitation in benthic marine communities. In: Bertness M.D., M.E. Hay and S.D. Gaines (eds.) *Marine Community Ecology.* Sinauer, Sunderland, MA pages 201-218

SELECTED UNREFEREED ARTICLES AND REPORTS

Bruno, J.F., Troubled waters in the Galápagos. Washington Post muli-media piece published on October 25, 2018 [link](https://www.washingtonpost.com/news/theworldpost/wp/2018/10/25/galapagos/?utm_term=.efa989446383)

Bruno, J.F., How to save the tropical rainforests of the ocean. Washington Post op-ed, January 9, 2018 [link](https://www.washingtonpost.com/news/theworldpost/wp/2018/01/09/coral-reefs/?tid=ss_mail&utm_term=.503c00e54383)

Bruno, J.F., My depressing summers in Belize. New York Times, Sunday Review, July 6 2017 [link](https://www.nytimes.com/2017/07/06/opinion/sunday/belize-caribbean-coral-reefs.html)

Written testimony before the Subcommittee on Water, Power, and the Oceans hearing “Examining the Creation and Management of Marine Monuments and Sanctuaries. March 15, 2017. US House of Representative. [link](http://democrats-naturalresources.house.gov/imo/media/doc/Bruno%20testimony_4c3.pdf)

Bruno, J.F. *In support of the Biscayne Bay marine reserve.* Op-ed, entered into the congressional record by Representative Grijalva (D-AZ). Originally written for the Miami Herald and published on TheSeamonster.net November 22, 2016 [link](http://theseamonster.net/2016/11/biscayne-bay-marine-reserve/)

Bruno, J.F., A. Valdivia, S. Hackerott, C.E. Cox, S.J. Green, I.M. Côté, L. Akins, C.A. Layman, W.F. Precht. Testing the grouper biocontrol hypothesis: A response to Mumby et al. 2013. PeerJ PrePrints 1:e139v1 [link](https://peerj.com/preprints/139/)

Bruno, J.F. 2013. A critique of Mumby et al. 2011 “Grouper as a natural biocontrol of invasive lionfish” PeerJ Preprints 1:e141v2 [link](https://peerj.com/preprints/141/)

Bruno, J.F. 2013. Coral reef baselines survey: what do we think is natural? FigShare [Link](http://figshare.com/articles/Coral_reef_baselines_survey_what_do_we_think_is_natural_/774627)

Bruno, J.F. 2011. Fact checking the 60 Minutes segment on Gardens of the Queen. Huffington Post [link](http://www.huffingtonpost.com/john-f-bruno/60-minutes-coral-reef_b_1158523.html)

Bruno, J.F. 2011. Let us eat (other people’s) fish. SeaMonser [link](http://theseamonster.net/2011/05/let-us-eat-other-peoples-fish/)

Bruno, J.F. 2010. Biodiversity loss continues unabated despite international efforts.

Huffington Post [link](http://www.huffingtonpost.com/john-f-bruno/biodiversity-loss-continu_b_561699.html)

Bruno, J.F. 2010. A down under journalistic wipeout in covering risks to the great barrier reef. Yale Forum on Climate Change and the Media link [link](http://www.yaleclimatemediaforum.org/2010/02/a-down-under-journalistic-wipeoutin-covering-risks-to-the-great-barrier-reef/)

Bruno, J.F. 2007. Professor makes personal appeal for coral. msnbc.com [link](http://www.msnbc.msn.com/id/22028443/)

POST DOCS

Kathryn Boyer (2003-2004, now an Associate Professor at San Francisco State U); Nessa O’Connor (2005, now a Lecturer at Queens U Belfast); Zachary Long (2005-2007, now an Associate Professor at UNCW); Karl Castillo (2008-2012, now an Assistant Professor at UNC-CH in Marine Sciences); Emily Darling (2013-2015 now a research scientist at the Wildlife Conservation Society / the University of Toronto)

**PAST GRADUATE STUDENTS**

**Elizabeth R. Selig**, PhD in 2008, now a senior scientist at the Norwegian Institute for Water Research. Dissertation title: *Effects of changing temperatures on coral reef health: implications for management*

**Sarah C. Lee**, PhD in 2008, now an Assistant Professor at DePauw University. Dissertation title: *Open systems in community ecology: dispersal, diversity, and ecosystem properties*

**Mary O’Connor**, PhD in 2009, now an Associate Professor at the University of British, Columbia, Vancouver. Dissertation title: *Linking physiological rates and community ecology: effects of ocean temperature on dispersal and species interactions*

**Pamela Reynolds**, PhD in 2011, now a post doc at UC Davis. Dissertation title: *The ecology of fear in estuarine communities: cascading effects of multiple predators*

**Rachel Gittman**, PhD in 2014, now a post doc at Northeastern University. Dissertation title:

*[The living shoreline approach as an alternative to shoreline hardening: implications for the ecology and ecosystem service delivery of salt marshes](https://cdr.lib.unc.edu/record/uuid%3Adc218110-e968-400b-946a-a81182afb9fa)*

**Courtney Cox**, PhD in 2014, now a post doc at the Smithsonian Institution, Washington DC. Dissertation title*: Evaluating strategies for restoring parrotfish populations in Belize*

**Serena Hackerott**, MS in 2014, now a visiting lecturer at the University of the Marshall Islands. Thesis title: *The effect of invasive lionfish on reef fish community structure along the Mesoamerican Barrier Reef*

**Abel Valdivia**, PhD in 2014, now a research scientist with the Center for Biological Diversity. Dissertation title: *The lost role of predatory reef fishes in Caribbean coral reefs*

**Lindsey Carr**, PhD in 2015. Dissertation title: *Effects of spatiotemporal temperature variation on benthic community dynamics in the Galápagos Islands*

**CURRENT GRADUATE STUDENTS**

Laura Mudge (PhD, Biology) andCatherine Alves (MS, CEE), Erin Spencer (MS, CEE), Kate Hould (PhD, Biology)

**UNDERGRADUATE STUDENT RESEARCH (last 5 years)**

Olivia Gorman (2018) *Thermal tolerance of invertebrate animals in the Galápagos Islands.*

Isabel Silva (2018) *Dietary preferences of sea urchins in the Galápagos Islands.*

Anna Smith (2018) *Among-clone variation in thermal tolerance of nursery-bred corals* (Acropora cervicornis)

Rachel Snider (2017) *Can local management improve reef resilience to climate change?*

Allison McGuire (2017) *Investigation of the impact of overfishing on marine biodiversity.*

Caroline Jasperse (2017) *Prevalence and implications of seafood mislabeling in global seafood markets.*

Logan Gin (2017) *Effectiveness of CUREs in achieving student learning outcomes*. In press: Gin et al. 2018 CBE—Life Sciences Education *In Press*

Zac Locklear (2016) *Changes in the community composition of corals across the Belizean Barrier Reef: 1996-2016*

Hope Gattis (North Carolina School of Science and Mathematics, 2016) *Effect of the recovery of the herbivorous sea urchin Diadema antillarum on macroalgae and coral recruitment*

Brittany Cooper (2016) *Frequency of mislabeling of North Carolina shrimp*

Carson Clough (2016) *Prevalence and consequences of seafood mislabeling in the United States and Canada*

Jenny Hughes (2015-2016) *Long term community dynamics of the Belizean Barrier Reef*

Sophia Schermerhorn (2015) *Spatial variation in herbivory among Cuban reefs*

Amanda DelVecchia, Ovik Banerjee, and Juan de Dios Morales (2011-2012) *Organic carbon inventories in natural and restored Ecuadorian mangrove forests* [PeerJ 2:e388](https://peerj.com/articles/388/)

Kim McKeever and Cort Smith (2012) *A quantitative analysis of shark and billfish tournaments in the United States*

Stacy Zhang and Kelly Speare (2013) *Relationships between richness and stability in coral reef communities* [PeerJ 2:e308](https://peerj.com/articles/308/)

Serena Hackerott (2012) *Native predators do not influence invasion success of Pacific lionfish on Caribbean reefs.* [PLoS One 8(7): e68259](http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0068259)

Lauren Pryzant (2012) *What to do when the oceans rise*. PLoS Biology [10(9): e1001387](http://www.plosbiology.org/article/info%3Adoi/10.1371/journal.pbio.1001387)

Phillip Lowe (2011) *Empirical models of transitions between coral reef states: effects of regions, marine protected areas, and environmental change scenarios*. [PLoS One 6(11) e26339](https://www.google.com/search?client=safari&rls=en&q=PLoS+One+6(11)+e26339&ie=UTF-8&oe=UTF-8)

PROFESSIONAL SERVICE TO THE DISCIPLINE

**Editor for** Ecology, Ecological Monographs (since 2005) and PeerJ

**Co-author and working group member**: 4th National Climate Change Assessment (2016-2018)

**Board member**, [Climate Law Institute](http://www.biologicaldiversity.org/programs/climate_law_institute/index.html) at the Center for Biological Diversity (since 2011)

**Ad-hoc Editor for** PLoS Biology, Trends in Ecology and Evolution, and Current Biology

**Co-creator and editor of** [SeaMonster](http://www.theseamonster.net)(a blog about ocean science)

**Outreach fellow for Polar Bears International** (November 2011)

**Co-developer of the Coral reef Temperature Anomaly Database,** AKA [CorTAD](http://www.nodc.noaa.gov/sog/Cortad/)

**Coordinator and speaker,** special session at the 2011 National Council for Science and the Environment “Our Changing Oceans” meeting titled “Impacts of Climate Change on Ocean Ecosystems in the 21st century”

**NOAA Ocean Acidification panel** (March 2012)

**Reviewer for** NSF, NOAA, Ecology Letters, Ecology, Canadian Journal of Botany, Marine Ecology Progress Series, Journal of Experimental Marine Biology and Ecology, Oikos, Oecologia, Trends in Ecology and Evolution, Diversity and Distributions, Marine Biology, Coral Reefs, PNAS, Science, and Nature

**Editor for** PLoS One (2009-2010)

**Member of the Three Seas Marine Biology Program’s Advisory Board** (2003-2007)

**Director and Lead Instructor of Cornell University’s Tropical Marine Science Program, Akumal, Mexico** (2000-2002)

**National Science Foundation Panel** (2005, 2013, 2016)

**Participant in NCEAS working group on “Insights from exotic species”** (2004-2007)

**Leader of NCEAS working group on “Community Saturation”** (September 2007)

**Participant in NCEAS working group on “Marine Climate Change Impacts”** (2009-2012)

SELECTED CONFERENCE AND SEMINAR ABSTRACT TITLES

\*invited talk, \*\*invited by grad students

\*\***Bruno, J.F.** Climate change, coral loss, and the curious case of the parrotfish paradigm: Why don't MPAs improve reef resilience? Duke University, September 2018

\***Bruno, J.F.** MPAs and parrotfish conservation have no effect on reef resilience; So what should we do? U.S. Coral Reef Task Force, June 2018

\***Bruno, J.F.** The impact of climate change on the oceans. The University of Oldenburg, Germany, May 2018

\***Bruno, J.F.** and Isabelle M. Côté.Marine protected areas do not increase the resilience of coral communities to global stressors. The University of Oxford, December 2017

\*\***Bruno, J.F.** Drivers of coral reef decline: what are the management options? Pennsylvania State University, November 2016

\***Bruno, J.F.** The human impact of climate change on the oceans. Plenary Speaker, World View Community College Symposium, November 2016

\***Bruno, J.F.** Exploring the role of temperature in the ocean through metabolic scaling. University of Mexico (UNAM), Puerto Morelos Marine Laboratory, Mexico, May 2016

\***Bruno, J.F.** The human impact of climate change on the oceans. Plenary Speaker, World View Symposium, November 2015

\*\***Bruno, J.F.** Exploring the role of temperature in the ocean through metabolic scaling. North Carolina State University, September 2015

\*\***Bruno, J.F.** Exploring the role of temperature in the ocean through metabolic scaling. Duke University Marine Lab, Graduate Students Research Symposium Plenary Speaker, April 2015

**Bruno, J.F.** C.E. Cox, A. Valdivia, C. Fieseler. How effective are Caribbean MPAs? International Marine Conservation Congress Meeting, Glasgow, Scotland, August 2014

\***Bruno, J.F.** Patterns and drivers of change on Caribbean reefs. University of Havana, Department of Oceanography, Cuba, June 2014

**\*Bruno, J.F.** The role of temperature in structuring marine communities. The University of Pisa, Italy, May 2014

\*\***Bruno, J.F.** Tracking changes in biodiversity is really hard: a coral reef example. Florida International University, April 2014

\*\***Bruno, J.F.** What really works in marine conservation. Florida State University. February, 2014

\***Bruno, J.F.** Coral Reef Macoecology. The University of California at Santa Barbara. March 2013

\*\***Bruno, J.F.** The use and misuse of ecological theory in coral reef management. Western Society of Naturalists (WSN) meeting, Student Symposium Invited Speaker, November 2012

\***Bruno, J.F.** What is the role of scientists in marine conservation? Duke University Marine Laboratory, April 2012

**Bruno, J.F.** Coral reef MPAs; what are they really good for? Benthic Ecology Meeting

March 2012

\***Bruno, J.F.** State of the Oceans 2012. Great decisions lecture series, UNC Chapel Hill, March 2012

\*\***Bruno, J.F.** Forget Columbus: Changes in Caribbean coral reefs since 1980, VIMS, February 2012

\***Bruno, J.F.** Threats to marine ecosystems in the Inter-American seas. Plenary Speaker, Inter-American Seas Symposium, Florida State University, December 2011

\*\***Bruno, J.F.** Changes in Caribbean reef communities: patterns, causes and mitigation. Plenary speaker for the Student Research Colloquium, College of Charleston, September 2011, Charleston SC

**Bruno, J.F.** Impacts of climate change on ocean ecosystems in the 21st century. National Council for Science and the Environment Annual Meeting, January 2011, Washington DC

\***Bruno, J.F.** Impacts of climate change on ocean ecosystems. RTI International, October 2010, Durham, NC

\***Bruno, J.F.** The future of coral reefs. CSIRO Climate Change Flagship, May 2010, Brisbane Australia

\*\***Bruno, J.F.** Florida's coral reefs: threats, decline, management, and signs of hope.

Newell Seminar Speaker, FSU and FSU Coastal and Marine Laboratory, February 2009, Tallahassee, FL and St. Teresa, FL

\***Bruno, J.F.** Climate change and coral reef resilience: are we expecting too much from marine reserves? Annual graduate student seminar speaker FIU, February 2009, Miami FL

\***Bruno, J.F.** Linking global change and coral epizootics. Sigma Xi, December 2008, Durham, NC

\***Bruno, J.F.** Effects of fishing and macroalgae on coral disease dynamics. International Coral Reef Symposium, July 2008, Fort Lauderdale, Florida

\***Bruno, J.F.** Climate change and coral reef resilience: are we expecting too much from marine reserves?Invited Plenary Speaker: Annual Meeting of the Ecological Society of Australia, 2008, Sydney Australia

\***Bruno, J.F.** Environmental drivers of coral epizootics and global patterns of coral reef decline. Invited seminar speaker UCLA, November 2007, Los Angeles CA

\***Bruno, J.F.** Global coral decline: regional baselines, timing, and variation. 2nd Annual Coral Reef Conservation and Management Conference, November 2006, Miami, FL

\***Bruno, J.F.** and S.C. Lee. The role of species saturation and propagule limitation in structuring benthic marine communities. Annual Meeting of the Ecological Society of America, August 2006, Memphis, TN

Long, Z.T., **J.F. Bruno**, and J.E. Duffy. Biodiversity mediates productivity through different mechanisms at adjacent trophic levels. Annual Meeting of the Ecological Society of America, August 2006, Memphis, TN

\***Bruno, J.F.** What are the cascading effects of predator diversity in marine food webs? International Temperate Reef Symposium, June 2006, Santa Barbara, CA

O’Connor, N.E., J.H. Grabowski and **J.F. Bruno**.Species loss and ecosystem functioning: Effects of simulated predator extinctions on an ecosystem engineer. International Temperate Reef Symposium, June 2006, Santa Barbara, CA

Casey, K.S., E.R. Selig, and **J.F. Bruno**. Use of satellite-based pathfinder sea surface temperatures for understanding coral disease dynamics. ASLO, July 2006, Victoria, British Columbia, Canada

\*Fridley, J, **J.F. Bruno** and B. Brown. Scale-dependent invasion patterns and null models of community assembly. Annual Meeting of the Ecological Society of America, August 2005, Montreal, Canada

\***Bruno, J.F.** Biodiversity in marine ecosystems. Duke University Marine Laboratory, April 2005, Beaufort, NC

\***Bruno, J.F.**, J.E. Duffy and Z. Long. Decomposing the net effects of plant diversity in marine ecosystems: selection versus complementarity. Benthic Ecology Meeting, March 2005, Williamsburg, VA

O’Connor, M.I. and **J.F. Bruno**. Cascading predator diversity effects dominated by the inclusion of omnivores. Benthic Ecology Meeting, March 2005, Williamsburg, VA

\***Bruno, J.F.** Macroecology of the cobble beach plant community. Duke University, March 2005

**Bruno, J.F.**, S.C. Lee, J. Kertesz, R. Carpenter, K. Boyer, J.E. Duffy. Is algal species identity or diversity related to primary production in benthic marine communities?Annual Meeting of the Ecological Society of America, August 2004, Portland, OR

**Bruno, J.F.**, S.C. Lee, J. Kertesz, R. Carpenter, K. Boyer, J.E. Duffy. Biodiversity and ecosystem functioning in benthic marine communities. Benthic Ecology Meeting, March 2004, Mobile AL

\***Bruno, J.F.**, K. Boyer, S.C. Lee, J.E. Duffy. Biodiversity and ecosystem functioning in multi-trophic systems: experimental tests in a benthic marine community. Annual meeting of the American Society of Limnology and Oceanography, February 2004, Honolulu, HI

\***Bruno, J.F.** Macroecology of the cobble beach plant community. Appalachian State University, November 2003, Boone, NC