

# ***CURRICULUM VITAE***

**James W. Porter, Ph.D.**

**Josiah Meigs Distinguished Professor**

Odum School of Ecology  
University of Georgia  
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## **PERSONAL INFORMATION**

Born: 5-October-1946

Wife: Karen G. Porter, Ph.D., Professor of Ecology, University of Georgia

## **RESEARCH AND SCIENTIFIC INTERESTS**

Population and disease ecology, ecology of coral reefs, biological and historical origins of species diversity, biogeography, systematics of the scleractinian corals, marine consequences of global climate change.

## **EDUCATIONAL EXPERIENCE**

B.S. (Biology) Yale College, New Haven, CT, 1965-1969

Ph.D. (Biology) Yale University, New Haven, CT, 1969-1973

## **EMPLOYMENT EXPERIENCE**

Associate Dean, Odum School of Ecology (2007 - )

Associate Director for Academic Affairs, Institute of Ecology (1994 - 1997)

Graduate Coordinator, Ecology Degree Program, University of Georgia (1992 - 1997)

Professor of Ecology & Marine Sciences, University of Georgia, Athens, GA (1993 - )

Professor of Zoology (1985 - 1993), University of Georgia, Athens, GA 30602

Curator of Invertebrates (1985 - 1995), University of Georgia Museum of Natural History

Coordinator, University of Georgia Alumnae Foundation Fellows Program (1984 - 1987)

Biologist, Environmental Protection Agency, Gulf Breeze, FL (1980)

Associate Professor of Zoology (1977 - 1984), University of Georgia, Athens, GA 30602

Assistant Professor (1973 - 1977), School of Natural Resources, University of Michigan, Ann Arbor, MI 48109

Smithsonian Pre-Doctoral Fellow (1971-1972), Smithsonian Trop. Res. Inst., Panama

Curatorial Assistant, Peabody Museum of Natural History, Yale University (1965-1969)

Member, Technical Advisory Board, International Dialogue on Underwater Munitions (2013 - )

## **FELLOWSHIPS, HONORS, AND SPECIAL AWARDS**

National Science Foundation Traineeship (1964)

National Science Foundation Undergraduate Research Participation Award (1968)

Honors in Biology, Yale College (1969)

U.S. National Museum & Smithsonian Tropical Research Institute, Pre-Doctoral Fellowship (1972-1973)

National Science Foundation Doctoral Dissertation Improvement Award (1972-1973)

John Spangler Nicolas Outstanding Doctoral Dissertation Award, Yale University (1973)

Editor, *Ecology* and *Ecological Monographs* (1975-1980)  
Woods Hole Marine Ecology Staff (Summers 1977 - 1979; 1986 - 1988)  
Elected to the *American Society of Naturalists* (1978)  
Creative Research Award, University of Georgia (1983)  
Elected *Fellow of the American Association Advancement Science* (1983)  
Outstanding Educator Award, *Gama Beta Phi National Honor Society* (1984)  
Faculty Excellence Award, *Golden Key Honor Society* (1985)  
Sandy Beaver Teaching Award (1988), University of Georgia  
Congressional Testimony, Joint Session House of Representatives and Senate (1992)  
Congressional Testimony, House of Representatives (1998)  
Congressional Testimony, House of Representatives (2004)  
University of Georgia *Josiah Meigs Excellence in Teaching Award* (2004)  
Josiah Meigs Distinguished Professor of Ecology (2004)  
*Eugene P Odum Award*, Ecological Society of America (2005)  
President-Elect, *Sigma Xi* (2006)  
President, *Sigma Xi* (2007)  
University of Georgia 2007 *Student Government Association Outstanding Professor Award*

## EDITORIAL BOARDS

Editor, *Ecology* and *Ecological Monographs* (1975-1980)

## SYMPOSIUM ORGANIZER

Fifth International Coral Reef Congress, Papeete, Tahiti (1985)  
Eleventh International Coral Reef Symposium Boca Raton, Florida (2009)

## MAJOR NSF OR NOAA FUNDED SCIENTIFIC EXPEDITIONS

Chief Scientist, *Johnson-Sea-Link Submarine*, Tongue of the Ocean, Bahama Is. (1972)  
Staff Scientist, *Hydrolab* Mission, Bahama Islands (1974)  
Staff Scientist, *R.V. Alpha Helix*, Clarion Island, Eastern Tropical Pacific (1974)  
Staff Scientist, *R.V. Alpha Helix*, Visayan Sea Expedition, Philippines (1975)  
Staff Scientist, *R.V. Ackerson*, Great Barrier Reef Expedition, Australia (1981)  
Staff Scientist, *Hydrolab* Mission, St. Croix, U.S. Virgin Islands (1982)  
Chief Scientist, *R.V. Sea Hawk*, Fore-Reef Expedition, Discovery Bay, Jamaica (1983)  
Staff Scientist, *Hydrolab* Mission, St. Croix, U.S. Virgin Islands (1985)  
Chief Scientist, *Aquarius* Mission 88-3, St. Croix, U.S. Virgin Islands (1988)  
Chief Scientist, U.S. National Park Service, Tracks I & II Coral Reef Studies (1989 - 1993)  
Staff Scientist, Coral Reef Biodiversity Project, Guam (1992)  
Chief Scientist, EPA Coral Reef Recovery Study, Charleston, SC (1992)

## SELECTED PUBLICATIONS

Porter, J.W. 1965. An annotated list of butterflies from northwestern Ohio. *Jour. Res. Lepid.* **4**:109-112  
Porter, J.W. 1972. Ecology and species diversity of coral reefs on opposite sides of the Isthmus of Panama. *Bull. Biol. Soc. Wash.* **2**:89-116.  
Porter, J.W. 1972. Patterns of species diversity in Caribbean reef corals. *Ecology* **53**:744-748.  
Porter, J.W. 1974. Community structure of coral reefs on opposite sides of the Isthmus of Panama. *Science* **186**:543-545.  
Wetthey, D.S., and J.W. Porter. 1976. Sun and shade differences in the productivity of reef corals. *Nature* **262**:281-282.

- Woodley, J.D., E.A. Chornesky, P.A. Clifford, J.B.C. Jackson, L.S. Kaufman, Knowlton, J.C. Lang, M.P. Pearson, J.W. Porter, M.C. Rooney, K.W. Rylaarsdam, V.J. Tunnicliffe, C.M. Wahle, J.L. Wulff, A.S.G. Curtis, M.D. Dallmeyer, B.P. Jupp, M.A.R. Koehl, J. Neigel, and E.M. Sides. 1981. Hurricane Allen's impact on Jamaican coral reefs. *Science* **214**:749-755.
- Porter, J.W., J.D. Woodley, G.J. Smith, J.E. Neigel, J.R. Battey, and D.G. Dallmeyer. 1981. Populations trends among Jamaican reef corals. *Nature* **294**:249-250.
- Porter, J.W., W.K. Fitt, H.J. Spero, C.S. Rogers, and M.W. White. 1989. Bleaching in reef corals: Physiological and stable isotopic responses. *Proc. Natl. Acad. Sci. USA* **86**:9342-9346.
- Porter, J.W., and O.W. Meier. 1992. Quantification of loss and change in Floridian reef coral populations. *Amer. Zool.* **32**:625-640.
- Cervino, J.M., T.J. Goreau, R.L. Hayes, L. Kaufman, I. Nagelkerken, K. Patterson, J.W. Porter, G.W. Smith, and C. Quirolo. 1998. Coral diseases. *Science* **280**: 499-500.
- Porter, J.W., S.K. Lewis, and K.G. Porter. 1999. The effect of multiple stressors on the Florida Keys coral reef ecosystem: A landscape hypothesis and a physiological test. *Limnol. Oceanogr.* **44**:941-949.
- Harvell, C.D., K. Kim, J.M. Burkholder, R.R. Colwell, P.R. Epstein, J. Grimes, E.E. Hofmann, E. Lipp, A.D.M.E. Osterhaus, R. Overstreet, J.W. Porter, G.W. Smith & G. Vasta. 1999. Emerging marine diseases - Climate links and anthropogenic factors. *Science* **285**:1505-1510.
- Porter, J.W. and J.I. Tougas. 2000. Reef ecosystems: Threats to biodiversity. *Encyc. Biodiv.* **5**:73-95.
- Porter, J.W. (Ed.) 2001. *The Ecology and Etiology of Newly Emerging Marine Diseases*. Kluwer Acad. Publ.; Dordrecht, The Netherlands. 201 pp.
- Porter, J.W. P. Dustan, W.C. Jaap, K.L. Patterson, V. Kosmynin, O. W. Meier, M. E. Patterson, and M. Parsons. 2001. Patterns of spread of coral disease in the Florida Keys. *Hydrobiologia* **460**:1-24.
- Santavy, D.L., E. Mueller, E.C. Peters, L. MacLaughlin, J.W. Porter, K.L. Patterson, and J. Campbell. 2001. Quantitative assessment of coral diseases in the Florida Keys: Strategy and methodology. *Hydrobiologia* **460**:25-38.
- Patterson, K.L., J.W. Porter, K.B. Ritchie, S.W. Polson, E. Mueller, E.C. Peters, D.L. Santavy, and G.W. Smith. 2002. The etiology of white pox, a lethal disease of the Caribbean elkhorn coral, *Acropora palmata*. *PNAS* **99**:8725-8730.
- Porter, J.W., and K.G. Porter, Eds. 2002. *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press; Boca Raton, FL 1000 pp.
- Porter, J.W., V. Kosmynin, K.L. Patterson, K.G. Porter, W.C. Jaap, J.L. Wheaton, K. Hackett, M. Lybolt, C.P. Tsokos, G. Yanev, D. M. Marcinek, J. Dotten, D. Eaken, M. Patterson, O. Meier, M. Brill, and P.D. Dustan. 2002. Detection of coral reef change by the Florida Keys Coral Reef Monitoring Project, pp. 749-769. In J.W. Porter and K.G. Porter, Eds. *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press, Boca Raton, FL.
- Porter, K.G., J.W. Porter, D.W. Porter, K. Thacker, C. Black, W. Gabbidon, L. Getten, C. Quirolo, D.M. Marcinek, and P. Dustan. 2002. Patterns of coral reef development in the Negril Marine Park: Necessity for a whole-watershed management plan, pp. 917-938. J.W. Porter and K.G. Porter, Ed. *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press, Boca Raton, FL.
- Tougas, J.I., and J.W. Porter. 2002. Differential coral recruitment patterns in the Florida Keys, pp. 789-811. In J.W. Porter and K.G. Porter, Eds. *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press, Boca Raton, FL.
- Porter, J.W. 2002. Introduction: The Everglades, Florida Bay, and Coral Reefs of the Florida Keys, pp. 1-16. In J.W. Porter and K.G. Porter, Eds. *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press, Boca Raton, FL.
- Hu, C., K. E. Hackett, M. K. Callahan, S. Andréfouët, J. Wheaton, K. Steidinger, W. Jaap, J. W. Porter, and F. E. Muller-Karger. 2003. The 2002 ocean color anomaly in the Florida Bight: A cause of local coral reef decline? *Geophys. Res. Lett.* **30**:1151-1155.
- Sutherland, K.P., James W. Porter, C. Torres. 2004. Disease and immunity in Caribbean and Indo-Pacific zooxanthellate corals. *Mar. Ecol. Prog. Ser.* **266**:273-302.
- Lafferty, K.D., J. W. Porter, and S.E. Ford. 2004. Are Diseases increasing in the ocean? *Ann. Rev. Ecol. Syst.* **35**:31-54.
- McCallum, H.I., A. Kuris, C.D. Harvell, K.D. Lafferty, G.W. Smith, and J.W. Porter. 2004. Does terrestrial epidemiology apply to marine systems? *Trends Ecol. Evol.* **19**:585-591.

- Harvell, D., R. Aronson, N. Baron, J. Connell, A. Dobson, S. Ellner, L. Gerber, K. Kim, A. Kuris, H. McCallum, K. Lafferty, B. McKay, J. Porter, M. Pascual, G. Smith, K. Sutherland, and J. Ward. 2004. The rising tide of ocean diseases: Unsolved problems and research priorities. *Front. Ecol. Environ.* **2**: 375-382.
- Rogers, C.S., K.P. Sutherland, and J.W. Porter. 2005. Has white pox disease been affecting *Acropora palmata* for over 30 years? *Coral Reefs* **24**:194.
- Swart, P.K., A. Szmant, J.W. Porter, R.E. Dodge, J. I Tougas. 2006. The isotopic composition of respired carbon dioxide in scleractinian corals: Implications for cycling organic carbon. *Geochimica et Cosmochimica Acta* **69**:1495-1509.
- Porter, J.W. 2007. A pivotal moment. *Sigma Xi Today* **17**(1):87.
- Porter, J.W. 2007. A strong voice for science. *Amer. Sci.* **4**:373.
- Porter, J.W., E.K. Lipp, K.P. Sutherland, and E. Mueller. 2008. The ecology of an infectious disease in the Florida Keys: From pathogens to politics, pp.387-403. In, R.S. Ostfeld, F. Keesing, and V. Eviner [Eds.] *The Ecology of Infectious Disease*. Princeton Univ. Press; Princeton, NJ.
- Brewer, C.A., A. R. Berkowitz, P. A. Conrad, J. W. Porter, and M. Waterman. 2008. Educating about infectious disease ecology, pp. 448-466. In, R.S. Ostfeld, F. Keesing, and V. Eviner [Eds.] *The Ecology of Infectious Disease*. Princeton University Press; Princeton, NJ.
- Somerfield, P.J., W.C. Jaap, K.R. Clarke, M. Callahan, K. Hackett, J. Porter, M. Lybolt, C. Tsokos, and G. Yanev. 2008. Changes in coral reef communities among the Florida Keys, 1996 – 2003. *Coral Reefs* **27**:951-965.
- Sutherland, K.P., J.W. Porter, J.W. Turner, B.J Thomas, E Looney, T.P. Luna, M.K. Meyers, J. C. Futch, E.K. Lipp. 2010. Human sewage identified as likely source of white pox disease of the threatened Caribbean elkhorn coral, *Acropora palmata*. *Environ. Microbiol.* **12**(5):1122-1131.
- Nobel, R.T., and J.W. Porter. 2011. Ecology of Marine Infectious Disease (EMID) Workshop (San Juan, Puerto Rico; February 12-13, 2011) to explore the State of the Science and Develop Recommendations for the National Science Foundation. National Science Foundation; Washington, DC. 20 pp.
- Porter, J.W., J. V. Barton, and C. Torres. 2011. Ecological, Radiological, and Toxicological Effects of Naval Bombardment on the Coral Reefs of *Isla de Vieques*, Puerto Rico, pp. 65-122. In, G.E Machlis, T. Hanson, Z. Spircic, and J.E. McKendry (Eds.) *Warfare Ecology: A New Synthesis for Peace and Security (NATO Science for Peace and Security Series – C: Environmental Security)*. Springer; Dordrecht, The Netherlands. xiii + 304 pp.
- Porter, J.W. 2011. The Professional Library of Dr. James W. Porter. vi + 176 pp. <http://jporter.MagCloud.com>.
- Sutherland, K.P., S. Shaban, J.L. Joyner, J.W. Porter, and E.K. Lipp. 2011. Human pathogen shown to cause disease in the threatened elkhorn coral *Acropora palmata*. *PLoS ONE* **6**(8):e23468.
- Porter, J.W., C. Torres, K.P. Sutherland, M.K. Meyers, M.K. Callahan, R. Ruzicka, and M. Collella. 2011. Prevalence, severity, lethality, and recovery of Dark Spots Syndrome among three Floridian reef-building corals. *Jour. Exp. Mar. Biol. Ecol.* **408**:79-87.
- Porter, J.W., M.K. Meyers, R. Ruzicka, M. Callahan, M. Collella, J. Kidney, S. Rathbun, and K.P. Sutherland. 2012. Catastrophic Loss of *Acropora palmata* in the Florida Keys: Failure of the ‘Sorcerer’s Apprentice Effect’ to aid recovery following the 2005 Atlantic Hurricane Season. *Proc. 12<sup>th</sup> Internat. Coral Reef Symp. (Cairns, Australia; 9-13 July, 2012)***19B**(2):1-5.
- Morrison, J.M., R. Ruzicka, M. A. Colella, V.I. Brinkhuis, K.S. Lunz, J.A. Kidney, M.K. Meyers, and J.W. Porter. 2012. Comparison of image acquisition technologies use for benthic habitat monitoring. *Proc. 12<sup>th</sup> Internat. Coral Reef Symp. (Cairns, Australia; 9-13 July, 2012)***11B**(3):1-5.
- Ruzicka, R., V. Brinkhuis, M. Colella, J. Kidney, J. Morrison, K. Lunz, G. Ward, K. Macaulay, J.W. Porter, and M.K. Meyers. 2012. Long-term monitoring of selected coral reefs in the Dry Tortugas National Park. Florida Fish & Wildlife conservation Commission / Fish & Wildlife Research Institute, St. Petersburg, FL. 53 pp.
- Porter, J.W. 2012. Corals are amazing creatures, pp. 180-181. In, Kruczynski, W.L. and P.J. Fletcher (Eds.) *Tropical Connections: South Florida’s Marine Environment*. IAN Press, University of Maryland Center for Environmental Science; Cambridge, MD. 492 pp.

- Porter, J.W. 2012. Thirty-two hard coral species can be found in south Florida, pp. 182-186. In, Kruczynski, W.L. and P.J. Fletcher (Eds.) *Tropical Connections: South Florida's Marine Environment*. IAN Press, University of Maryland; Cambridge, MD. 492 pp.
- Meyers, M., J.W. Porter, J. Wares. 2013. Genetic diversity of fluorescent proteins in Caribbean agariciid corals. *Jour. Heredity* 104(4):572-577.
- Ruzicka, R. R., Colella, M. A., Porter, J. W., Morrison, J. M., Kidney, J. A., Brinkhuis, V., Lunz, K. S., Mcaulay, K. A., Bartlett, L. A., Meyers, M. K., and J. Colee. 2013. Temporal changes in benthic assemblages on Florida Keys reefs eleven years after the 1997-1998 El Nino. *Mar. Ecol. Prog. Ser.* **489**:125-141.
- Alevizon, W., and J.W. Porter 2015. Coral loss and fish guild stability on a Caribbean coral reef: 1974 – 2000. *Environ. Biol. Fish.* **98**:1035-1045. doi:[10.1007/s10641-014-0337-5](https://doi.org/10.1007/s10641-014-0337-5)
- Kemp, D. W., A.R. Rivers, K.M Kemp, E.K. Lipp, J.W. Porter, and J.P/ Wares. 2015. Spatial Homogeneity of bacterial communities associated with the surface mucus layer of the reef-building coral *Acropora palmata*. *PLOS ONE*, **10** (12). doi:[10.1371/journal.pone.0143790](https://doi.org/10.1371/journal.pone.0143790)
- Joyner, J.L. K.P. Sutherland, D. Kemp, B. Berry, A. Griffin, J.W. Porter, H.B. Amador, H. K.G. Noren, and E.K. Lipp. 2015. Systematic analysis of white pox disease in *Acropora palmata* of the Florida Keys and role of *Serratia marcescens*. *Applied Environ. Microbiol.* **81**:4451-4457. doi:[10.1128/AEM.00116-15](https://doi.org/10.1128/AEM.00116-15)
- Woodley, C., C.A. Downs, A.W. Bruckner, J.W. Porter, and S.B. Galloway. (Eds.) 2016. *Diseases of Coral*. John Wiley & Sons, Inc.; Hoboken, NJ. xiii + 582 pp.
- Sutherland, K. P., J.W. Porter, and E.K. Lipp. 2016. *Acroporid Serratiosis*. (pp. 221-230). In C. Woodley, C. Downs, A. Bruckner, J. Porter, & S. Galloway (Eds.), *Diseases of Corals* Hoboken, NJ: John Wiley & Sons, Inc.; Hoboken, NJ. xiii + 582 pp.
- Porter, J. W. 2016. Forward to: *Diseases of Coral*. (pp. 1-3) In C. Woodley, C. Downs, A. Bruckner, J. Porter, & S. Galloway (Eds.), *Diseases of Corals* Hoboken, NJ: John Wiley & Sons, Inc.; Hoboken, NJ. xiii + 582 pp..
- Woodley, C., C.A. Downs, and J.W. Porter. 2016. Recent Changes in Coral Taxonomy. (pp. xiii) In C. Woodley, C. Downs, A. Bruckner, J. Porter, & S. Galloway (Eds.), *Diseases of Corals* Hoboken, NJ: John Wiley & Sons, Inc.; Hoboken, NJ. xiii + 582 pp
- Kemp, D. W., Ruzicka, R. R., Colella, M. A., Porter, J. W., & Fitt, W. K. (2016). Life after cold anomaly: Physiological and demographic effects of Florida Keys reef-building corals. *Ecosphere*.
- Sutherland, K.P., B. Berry, A. Park, D.W. Kemp, K. M. Kemp, E. Lipp, and J.W. Porter. 2016. Shifting white pox aetiologies affecting *Acropora palmata* in the Florida Keys, 1994 – 2014. *Phil. Trans. Roy. Soc. B.* 20150205. <http://dx.doi.org/10.1098/rstb.2015.0205>

## SELECTED GRANTS

- NSF OCE-81-10918 (1981). Long term analysis of benthic population and community dynamics on a coral reef. J.W. Porter, PI/PD, 2 yrs., \$158,587.
- NSF OCE-83-00623 (1983). Temporary commensalism between benthic macro-algae and gorgonian corals. J.W. Porter, PI/PD, Co-PI: C. Slocum. 2 yrs., \$23,000.
- NSF OCE-87-18256 (1987). Nutrient sources and sufficiency for symbiotic zooxanthellae. J.W. Porter, PI/PD, 3 yrs., \$24,526.
- NSF OCE-88-05761 (1988). "Bleaching" in Caribbean reef corals. J.W. Porter, PI/PD, 1 yr., \$20,000.
- NSF OCE-93-18503 (1993). The physiology of sclerochronology: Mechanisms and variation in formation of the high density band in the massive coral *Montastraea annularis*. J.W. Porter, PI/PD, 3 yrs., \$111,350.
- NOAA Porter, J.W. and W. Alevizon. Design and implementation of a coral reef marine protected area corridor in the Bahamas. NOAA International Programs (01/JAN/03 to 31/DEC/2004) \$15,000.
- EPA Porter, J.W., E. Lipp, and K.P. Sutherland. 2004. The etiology and distribution of coral disease in the Florida Keys. U.S. Environmental Protection Agency (01/JAN/04 to 31/DEC/05) \$208,000.
- CPR Porter, J.W. (P.I./P.D.) 2005. The physical and chemical effects of naval bombardment on Vieques, P.R. coral reefs. Commonwealth of Puerto Rico (01/JUN/03 to 31/DEC/05) \$15,000.

Entrix Fitt. W.K. (P.I./ P.D.) and J.W. Porter (co-P.I.) 2010-2012. Differential response to bleaching and oil exposure of reef-building corals in the Florida Keys. (2010 to 2012).  
EPA 21-95 (1995 - 2011). Long-term monitoring of coral reef survival in the Florida Keys. J.W. Porter, PI/PD, 16 yrs., \$1,750,000.

## **CURRENT GRANTS**

NIH/NSF Porter, J.W. (P.I./P.D) 2010 – 2017. The Ecology of a Reverse Zoonosis: Human-Environment Interactions in the Transmission, Persistence, and Virulence of White Pox Disease in Elkhorn Coral (Oct-2010 to October-2017) \$2,300,000.  
UGA Porter, JW. 2008-2017. Butterflies of Monteverde, Costa Rica. (01/Jun/08 to 31/Dec/17) \$11,000.

## **GRADUATE ADVISING**

22 Ph.D. Students  
9 Master's Students  
2 Postdoctoral Fellows

## **DIVING EXPERIENCE**

SCUBA Certified, 1965.  
NAUI/PADI Certified, 1977.  
Nitrox / Heliox / Mixed-Gas Certified, 1983.  
NOAA Working Diver, 1984.  
NOAA Saturation Certified in both *HydroLab* (1974) and *Aquarius* (1988).  
AAUS – UGA (American Association of Underwater Scientists) Certified, 1999 – 2016.  
>5,000 Research Scuba Dives.