Robert W. Thacker

*Curriculum Vitae*

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Department of Ecology and Evolution E-mail: robert.thacker@stonybrook.edu

Stony Brook University

Stony Brook, NY 11794-5245

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| **EDUCATION** |  |

1995 Ph.D., Biology, University of Michigan, Ann Arbor.

1992 M.S., Biology, University of Michigan, Ann Arbor.

1990 B.S., Zoology, Duke University, Durham, North Carolina.

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| **Professional Experience** |  |

2015-present Professor and Chairperson, Dept. of Ecology and Evolution, Stony Brook University.

2019-present Research Associate, Smithsonian Tropical Research Institute, Republic of Panama

2012-2015 Professor, Dept. of Biology, University of Alabama at Birmingham.

2012-2013 Interim Chair, Dept. of Biology, University of Alabama at Birmingham.

2006-2015 Scientist, UAB Center for AIDS Research.

2006-2012 Associate Professor, Dept. of Biology, University of Alabama at Birmingham.

2000-2006 Assistant Professor, Dept. of Biology, University of Alabama at Birmingham.

* 1. Postdoctoral Research Associate, University of Guam Marine Laboratory.

 Advisor: Dr. Valerie J. Paul.

1996-1998 Postdoctoral Research Associate, Pacific Biomedical Research Center,

 University of Hawaii. Advisor: Dr. Michael G. Hadfield.

* 1. Postdoctoral Research Associate, University of Guam Marine Laboratory.

Advisor: Dr. Valerie J. Paul.

1990-1995 Doctoral Research, Dept. of Biology, University of Michigan at Ann Arbor.

 Advisor: Dr. Brian A. Hazlett (Retired).

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| **AWARDS** |  |

2008 Inaugural Dean’s Award for Excellence in Mentorship, UAB Graduate School.

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| **Grants and Fellowships Received** |  |

2018-2021 Collaborative Research: Investigations into microbially mediated ecological diversification in sponges. Biological Oceanography Program, Division of Ocean Sciences, **National Science Foundation**, $799,890 total ($99,068 to RWT).

2015-2019 *Collaborative Research: ARTS: Integrative Research and Training in Tropical Taxonomy*. Systematics and Biodiversity Science, Division of Environmental Biology, **National Science Foundation**, $605,761 total ($73,406 to RWT).

2012-2017 *Collaborative Research: arbor: Comparative Analysis Workflows for the Tree of Life*. Assembling, Visualizing, and Analyzing the Tree of Life, Division of Environmental Biology, **National Science Foundation,** $4,000,000 total ($499,999 to RWT).

2012-2015 *Collaborative Research: Next Generation Phenomics for the Tree of Life*. Assembling, Visualizing, and Analyzing the Tree of Life, Division of Environmental Biology, **National Science Foundation,** $3,216,421 total ($79,110 to RWT).

2008-2014 *Collaborative Research: ATOL: PorToL – The Porifera Tree of Life Project*. Assembling the Tree of Life Program, Division of Environmental Biology, **National Science Foundation,** $2,940,000 ($1,076,938 to RWT).

# 2007-2011 *Collaborative Research: Aplysina Red Band Syndrome: Investigating the etiology, pathogenesis, and ecology of an emerging marine disease.* Biological Oceanography Program, Division of Ocean Sciences, National Science Foundation, $689,512 ($236,005 to RWT).

# 2008-2010 *GAC Biofilters in Retrofit Applications*. American Water Works Research Foundation, Subcontract to RWT from Birmingham Water Works Board, $9,928.

# 2004-2007 *Collaborative Research: Molecular and Chemical Ecology of Freshwater Sponges: Impacts of Sponge Hosts on Symbiotic Microbial Communities*.

#  Molecular and Cellular Biosciences Program, Microbial Observatories,

#  National Science Foundation, $99,090 ($38,821 to RWT).

2004-2007 *Assessing the Diversity of Sponge-Microbial Associations: Developing Bioinformatic Tools for Ocean Biotechnology Research*.

**National Institute for Undersea Science and Technology**, NOAA, $126,990.

2002-2005 *Coevolution of Marine Sponges and Symbiotic Cyanobacteria and Eubacteria.*

Systematic Biology Program, **National Science Foundation**, $179,066.

2002-2003 *Marine Sponges from the Alabama Coast: Anti-fouling Activity and Symbiotic Bacterial Communities.* **Mississippi-Alabama Sea Grant Consortium**, $10,000.

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| **PEER-REVIEWED Publications**  |  |

Freeman CJ, Easson CG, Matterson KO, Thacker RW, Baker DM, Paul VJ. 2020. Microbial symbionts and ecological divergence of Caribbean sponges: a new perspective on an ancient association. ***The ISME Journal*** 14(6): 1571-1583. doi: 10.1038/s41396-020-0625-3

Easson CG, Chaves-Fonnegra A, Thacker RW, Lopez JV. 2020. Host population genetics and biogeography structure the microbiome of the sponge *Cliona delitrix*. ***Ecology and Evolution*** 10(4): 2007-2020. doi: 10.1002/ece3.6033.

Wilkins LGE, Leray M, O’Dea A, Yuen B, Peixoto RS, Pereira TJ, Bik HM, Coil DA, Duffy JE, Herre EA, Lessios HA, Lucey NM, Mejia LC, Rasher DB, Sharp KH, Sogin EM, Thacker RW, Thurber RV, Wcislo WT, Wilbanks EG, Eisen JA. 2019 Host-associated microbiomes drive structure and function of marine ecosystems. ***PLoS Biology*** 17(11): e3000533. https://doi.org/10.1371/journal.pbio.3000533

Blank CE, Cui H, Mao J, Moore LR, Thacker RW, Walls RL. 2018. Accelerating the large-scale study of prokaryotic phenotypes and niche space evolution through time using the MicrO ontology, MicroPIE, and MicroPIEDigester software. In: Thessen, AE (Ed.) ***Application of Semantic Technologies in Biodiversity Science***. Studies on the Semantic Web, IOS Press/AKA Verlag. http://ebooks.iospress.nl/volume/application-of-semantic-technology-in-biodiversity-science

Moitinho-Silva L, Nielsen S, Amir A, Gonzalez A, Ackermann GL, Cerrano C, Astudillo-Garcia C, Easson C, Sipkema D, Liu F, Steinert G, Kotoulas G, McCormack GP, Feng G, Bell JJ, Vicente J, Björk JR, Montoya JM, Olson JB, Reveillaud J, Steindler L, Pineda M-C Marra MV, Ilan M, Taylor MW, Polymenakou P, Erwin PM, Schupp PJ, Simister RL, Knight R, Thacker RW, Costa R, Hill RT, Lopez-Legentil S, Dailianis T, Ravasi T, Hentschel U, Li Z, Webster NS, Thomas T. 2017. The sponge microbiome project. ***GigaScience*** 6: 1-7. doi: 10.1093/gigascience/gix077

Pérez T, Díaz M-C, Ruiz C, Cóndor-Luján B, Klautau M, Hajdu E, Lobo-Hajdu G, Zea S, Pomponi SA, Thacker RW, Carteron S, Tollu G, Pouget-Cuvelier A, Thélamon P, Marechal J-P, Thomas OP, Ereskovsky AV, Vacelet J, Boury-Esnault N. 2017. How a collaborative integrated taxonomic effort has trained new spongiologists and improved knowledge of Martinique Island (French Antilles, eastern Caribbean Sea) marine biodiversity. ***PLoS ONE*** 12(3): e0173859. doi: 10.1371/journal.pone.0173859.

Collin R, Fredericq S, Freshwater DW, Gilbert E, Madrid M, Maslakova S, Miglietta MP, Rocha RM, Rodríguez E, Thacker RW. 2016. TaxaGloss – a glossary and translation tool for biodiversity studies. ***Biodiversity Data Journal*** 4: e10732. doi: 10.3897/BDJ.4.e10732.

Thomas T, Moitinho-Silva L, Lurgi M, Björk JR, Easson C, Astudillo-Garcia C, Olson JB, Erwin PM, Lopez-Legentil S, Luter H, Chaves-Fonnegra A, Costa R, Schupp PJ, Steindler L, Erpenbeck D, Gilbert J, Knight R, Ackermann G, Lopez JV, Taylor MW, Thacker RW, Montoya JM, Hentschel U, Webster NS. 2016. Diversity, structure and convergent evolution of the global sponge microbiome. ***Nature Communications*** 7: 11870. doi: 10.1038/ncomms11870.

Slattery M, Gochfeld DJ, Diaz MC, Thacker RW, Lesser MP. 2016. Variability in chemical defense across a shallow to mesophotic depth gradient in the Caribbean sponge *Plakortis angulospiculatus*. ***Coral Reefs*** 35: 11-22. doi: 10.1007/s00338-015-1324-9.

Easson CG, Matterson KO, Freeman CJ, Archer SK, Thacker RW. 2015. Variation in species diversity and functional traits of sponge communities near human populations in Bocas del Toro, Panama. ***PeerJ*** 3:e1385. doi: 10.7717/peerj.1385.

Baker DM, Freeman CJ, Knowlton N, Thacker RW, Kim K, Fogel ML. 2015. Productivity links morphology, symbiont specificity, and bleaching in the evolution of Caribbean octocoral symbioses. ***The ISME Journal*** 9:2620-2629. doi: 10.1038/ismej.2015.71***.***

Diaz MC, Thacker RW, Redmond NE, Perez T, Collins AG. 2015. *Vansoestia caribensis* gen. nov., sp. nov.: first report of the family Ianthellidae (Verongida, Demospongiae) in the Caribbean. ***Zootaxa*** 3956(3):403-412. doi: 10.11646/zootaxa.3956.3.5.

Freeman, CJ, Baker DM, Easson CG, Thacker RW. 2015. Shifts in sponge-microbe mutualisms across an experimental irradiance gradient. ***Marine Ecology Progress Series*** 526:41-53. doi: 10.3354/meps11249.

Deans AR, Lewis SE, Huala E, Anzaldo SS, Ashburner M, et al. 2015. Finding our way through phenotypes. ***PLoS Biology*** 13(1):e1002033. doi: 10.1371/journal.pbio.1002033.

Easson CG, Thacker RW. 2014. Phylogenetic signal in the community structure of host-specific microbiomes of tropical marine sponges. ***Frontiers in Microbiology*** 5:532. doi: 10.3389/fmicb.2014.00532.

Thacker RW, Diaz MC, Kerner A, Vignes-Lebbe R, Segerdell E, Haendel MA, Mungall CJ. 2014. The Porifera Ontology (PORO): enhancing sponge systematics with an anatomy ontology. ***Journal of Biomedical Semantics*** 5:39. doi: 10.1186/2041-1480-5-39.

Koo H, Mojib N, Thacker RW, Bej AK. 2014. Comparative analysis of bacterial community-metagenomics in coastal Gulf of Mexico sediment microcosms following exposure to Macondo oil (MC252). ***Antonie van Leeuwenhoek*** 106(5):993-1009. doi: 10.1007/s10482-014-0268-3.

Olson JB, Thacker RW, Gochfeld DJ. 2014. Molecular community profiling reveals impacts of time, space, and disease status on the bacterial community associated with the Caribbean sponge *Aplysina cauliformis.* ***FEMS Microbiology Ecology***87(1):268-279. doi: 10.1111/1574-6941.12222.

GIGA Community Scientists. 2014. The Global Invertebrate Genomics Alliance (GIGA): Developing community resources to study diverse invertebrate genomes. ***Journal of Heredity*** 105(1):1-18. doi: 10.1093/jhered/est084.

Easson CG, Slattery M, Momm HG, Olson JB, Thacker RW, Gochfeld DJ. 2013. Exploring individual- to population-level impacts of disease on coral reef sponges: using spatial analysis to assess the fate, dynamics, and transmission of *Aplysina* red band syndrome (ARBS). ***PLoS ONE*** 8(11): e79976. doi: 10.1371/journal.pone.0079976.

Camacho FA, Thacker RW. 2013. Predator cues alter habitat use by the amphipod *Hyalella azteca* (Saussure). ***Freshwater Science*** 32(4):1148-1154. doi: 10.1899/12-176.1.

Burleigh G, Alphonse K, Alverson AJ, Bik HM, Blank C, Cirranello AL, Cui H, Daly M, Dietterich TG, Gasparich G, Irvine J, Julius M, Kaufman S, Law E, Liu J, Moore L, O'Leary MA, Passarotti M, Ranade S, Simmons NB, Stevenson DW, Thacker RW, Theriot EC, Todorovic S, Velazco PM, Walls RL, Wolfe JM, Yu M. 2013. Next-generation phenomics for the tree of life. ***PLOS Currents Tree of Life***. doi: 10.1371/currents.tol.085c713acafc8711b2ff7010a4b03733.

Harmon LJ, Baumes J, Hughes C, Soberon J, Specht CD, Turner W, Lisle C, Thacker RW. 2013. Arbor: Comparative analysis workflows for the tree of life. ***PLOS Currents Tree of Life***. doi: 10.1371/currents.tol.099161de5eabdee073fd3d21a44518dc.

Thacker RW, Hill AL, Hill MS, Redmond NE, Collins AG, Morrow CC, Spicer L, Carmack CA, Zappe ME, Pohlmann D, Hall C, Diaz MC, Bangalore PV. 2013. Nearly complete 28S rRNA gene sequences confirm new hypotheses of sponge evolution. ***Integrative and Comparative Biology*** 53(3): 373-387. doi: 10.1093/icb/ict071.

Morrow CC, Redmond NE, Picton BE, Thacker RW, Collins AG, Maggs CA, Sigwart JD, Allcock AL. 2013. Molecular phylogenies support homoplasy of multiple morphological characters used in the taxonomy of Heteroscleromorpha (Porifera: Demospongiae). ***Integrative and Comparative Biology*** 53(3): 428-446. doi: 10.1093/icb/ict065.

Redmond NE, Morrow CC, Thacker RW, Diaz MC, Boury-Esnault N, Cardenas P, Hajdu E, Lobo-Hajdu G, Picton BE, Pomponi SA, Kayal E, Collins AG. 2013. Phylogeny and systematics of Demospongiae in light of new small-subunit ribosomal DNA (18S) Sequences. ***Integrative and Comparative Biology*** 53(3): 388-415. doi: 10.1093/icb/ict078.

Diaz MC, Thacker RW, Redmond NE, Matterson KO, Collins AG. 2013. Phylogenetic novelties and geographic anomalies among tropical Verongida. ***Integrative and Comparative Biology*** 53(3): 482-494. doi:10.1093/icb/ict033.

Alvizu A, Diaz MC, Bastidas C, Rützler K, Thacker RW, Marquez LM. 2013. A skeleton-less sponge of Caribbean mangroves: invasive or undescribed? ***Invertebrate Biology*** 132(2): 81-94. doi:10.1111/ivb.12015.

Huang JP, Swain AK, Thacker RW, Ravindra R, Andersen DT, Bej AK. 2013. Bacterial diversity of the rock-water interface in an East Antarctic freshwater ecosystem, Lake Tawani. ***Aquatic Biosystems*** 9:4 doi:10.1186/2046-9063-9-4.

Freeman CJ, Thacker RW, Baker DM, Fogel ML. 2013. Quality or quantity: is nutrient transfer driven more by symbiont identity and productivity than by symbiont abundance? ***The*** ***International Society for Microbial Ecology Journal*** 7(6): 1116-1125. doi: 10.1038/ismej.2013.7.

Hill MS, Hill AL, Lopez J, Peterson KJ, Pomponi S, Diaz MC, Thacker RW, Adamska M, Boury-Esnault N, Cárdenas P, Chaves-Fonnegra A, Danka E, De Laine B, Formica D, Hajdu E, Lobo-Hajdu G, Klontz S, Morrow CC, Patel J, Picton B, Pisani D, Pohlmann D, Redmond NE, Reed J, Richey S, Riesgo A, Rubin E, Russell Z, Rützler K, Sperling EA, di Stefano M, Tarver JE, Collins AG. 2013. Reconstruction of family-level phylogenetic relationships within Demospongiae (Porifera) using nuclear encoded housekeeping genes. ***PLoS ONE*** 8(1):e50437. doi:10.1371/journal.pone.0050437.

Shirey TB, Thacker RW, Olson JB. 2012. Composition and stability of bacterial communities associated with granular activated carbon and anthracite filters in a pilot scale municipal drinking water treatment facility. ***Journal of Water and Health*** 10(2): 244-255***.*** doi:10.2166/wh.2012.092.

Thacker RW, Freeman CJ. 2012. Sponge-microbe symbioses: Recent advances and new directions. ***Advances in Marine Biology*** 62: 57-111.

Gochfeld DJ, Easson CG, Freeman CJ, Thacker RW, Olson JB. 2012. Disease and nutrient enrichment as potential stressors on the Caribbean sponge *Aplysina cauliformis* and its bacterial symbionts. ***Marine Ecology Progress Series*** 456: 101-111.

Gochfeld DJ, Kamel HN, Olson JB, Thacker RW. 2012. Trade-offs in defensive metabolite production but not ecological function in healthy and diseased sponges. ***Journal of Chemical Ecology*** 38: 451-462.

Erwin PM, Olson JB, Thacker RW. 2011. Phylogenetic diversity, host-specificity, and community profiling of sponge-associated bacteria in the northern Gulf of Mexico. ***PLoS ONE*** 6(11): e26806. doi:10.1371/journal.pone.0026806.

Freeman CJ, Thacker RW. 2011. Complex interactions between marine sponges and their symbiotic microbial communities. ***Limnology and Oceanography*** 56(5): 1577-1586. doi:10.4319/lo.2011.56.5.1577

Thacker RW, Diaz MC, de Voogd NJ, van Soest RWM, Freeman CJ, Mobley AS, LaPietra J, Cope K, McKenna S. 2010. Assessment of sponge biodiversity on Saba Bank, Netherlands Antilles. ***PLoS ONE*** 5(5): e9622. doi:10.1371/journal.pone.0009622.

Collin R, Mobley AS, Lopez LB, Leys SP, Diaz MC, Thacker RW. 2010. Phototactic responses of larvae from the marine sponges *Neopetrosia proxima* and *Xestospongia bocatorensis* (Haplosclerida: Petrosiidae). ***Invertebrate Biology*** 129(2): 121-128.

Sharp K, Arthur KE, Gu L, Ross C, Harrison G, Gunasekera SP, Meickle T, Matthew S, Luesch H, Thacker RW, Sherman DH, Paul VJ. 2009. Phylogenetic and chemical diversity of three chemotypes of bloom-forming *Lyngbya* species (Cyanobacteria: Oscillatoriales) from reefs of Southeastern Florida. ***Applied and Environmental Microbiology*** 75(9): 2879-2888.

Slattery M, Kamel HN, Ankisetty S, Gochfeld DJ, Hoover CA, Thacker RW. 2008. Hybrid vigor in a tropical Pacific soft coral community. ***Ecological Monographs*** 78(3): 423-443.

Erwin PM, Thacker RW. 2008. Cryptic diversity of the symbiotic cyanobacterium *Synechococcus spongiarum* among sponge hosts. ***Molecular Ecology*** 17: 2937-2947.

Erwin PM, Thacker RW. 2008. Phototrophic nutrition and symbiont diversity of two Caribbean sponge-cyanobacteria symbioses. ***Marine Ecology Progress Series*** 362: 139-147.

Taylor MW, Thacker RW, Hentschel U. 2007. Evolutionary insights from sponges. ***Science*** 316: 1854-1855.

Erwin PM, Thacker RW. 2007. Incidence and identity of photosynthetic symbionts in Caribbean coral reef sponge communities. ***Journal of the Marine Biological Association of the United Kingdom*** 87: 1683-1692.

Thacker RW, Diaz MC, Rützler K, Erwin PM, Kimble SJA, Pierce MJ, Dillard SL. 2007. Phylogenetic relationships among the filamentous cyanobacterial symbionts of Caribbean sponges and a comparison of photosynthetic production between sponges hosting filamentous and unicellular cyanobacteria. In: Custódio MR, Lôbo-Hajdu G, Hajdu E, Muricy G (eds.). ***Porifera Research: Biodiversity, Innovation, and Sustainability***, Série Livros 28. Museu Nacional, Rio de Janeiro.pp. 621-626.

Diaz MC, Thacker RW, Rützler K, Piantoni C. 2007. *Haliclona* (*Soestella*) *walentinae* (Chalinidae, Haplosclerida) and *Xestospongia* *bocatorensis* (Petrosiidae, Haplosclerida), two new sponge species from Caribbean Panamá with filamentous cyanobacterial symbionts. In: Custódio MR, Lôbo-Hajdu G, Hajdu E, Muricy G (eds.). ***Porifera Research: Biodiversity, Innovation, and Sustainability***, Série Livros 28. Museu Nacional, Rio de Janeiro.pp. 31-39.

Gochfeld DJ, Schlöder C, Thacker RW. 2007. Sponge community structure and disease prevalence on coral reefs in Bocas del Toro, Panamá. In: Custódio MR, Lôbo-Hajdu G, Hajdu E, Muricy G (eds.). ***Porifera Research: Biodiversity, Innovation, and Sustainability***, Série Livros 28. Museu Nacional, Rio de Janeiro.pp. 335-343.

Erwin PM, Thacker RW. 2007. Phylogenetic analyses of marine sponges within the order Verongida: a comparison of morphological and molecular data. ***Invertebrate Biology*** 126(3): 220-234.

Taylor MW, Hill RT, Piel J, Thacker RW, Hentschel U. 2007. Soaking it up: the complex lives of marine sponges and their microbial associates. ***The*** ***International Society for Microbial Ecology Journal*** 1(3): 187-190.

Thacker RW, Camacho FA. 2007. Invertebrate herbivores induce saxitoxin production in *Lyngbya wollei.* In: Hudnell HK (ed.) ***Cyanobacterial Harmful Algal Blooms: State of the Science and Research Needs****,* Advances in Experimental Medicine & Biology 619: 312-313.

Camacho FA, Thacker RW. 2006. Amphipod herbivory on the freshwater cyanobacterium *Lyngbya wollei*: chemical stimulants and morphological defenses. ***Limnology and Oceanography*** 51: 1870-1875.

Thacker RW, McLeod AM, McLeod SW. 2005. Herbivore-induced saxitoxin production in the freshwater cyanobacterium *Lyngbya wollei*. ***Algological Studies*** 117: 415-425.

Paul VJ, Thacker RW, Banks K, Golubic S. 2005. Benthic cyanobacterial bloom impacts the reefs of South Florida (Broward County, USA). ***Coral Reefs*** 24: 693-697.

Flatt PM, Gautschi JT, Thacker RW, Musafija-Girt M, Crews P, Gerwick WH. 2005. Identification of the cellular site of polychlorinated peptide biosynthesis in the sponge *Dysidea (Lamellodysidea) herbacea* and symbiotic cyanobacterium *Oscillatoria spongeliae* by CARD-FISH analysis. ***Marine Biology*** 147: 761-774.

Thacker RW. 2005. Impacts of shading on sponge-cyanobacteria symbioses: a comparison between host-specific and generalist associations. ***Integrative and Comparative Biology***45: 369-376.

Sotka EE, Thacker RW. 2005. Do some corals like it hot? ***Trends in Ecology and Evolution*** 20(2): 59-62.

Thacker RW. 2004. Biodiversity. ***Journal of Natural Products*** 67(9): 1636.

Thacker RW, Paul VJ. 2004. Morphological, chemical, and genetic diversity of tropical marine cyanobacteria, *Lyngbya* spp. and *Symploca* spp. (Oscillatoriales). ***Applied and Environmental Microbiology*** 70(6): 3305-3312.

Thacker RW, Starnes S. 2003. Host specificity of symbiotic cyanobacteria, *Oscillatoria* *spongeliae*, in marine sponges, *Dysidea* spp. ***Marine Biology*** 142: 643-648.

Becerro MA, Thacker RW, Turon X, Uriz MJ, Paul VJ. 2003. Biogeography of sponge chemical ecology: comparisons of tropical and temperate defenses. ***Oecologia*** 135: 91-101.

Thacker RW, Paul VJ. 2001. Are benthic cyanobacteria indicators of nutrient enrichment? Relationships between cyanobacterial abundance and environmental factors on the reef flats of Guam. ***Bulletin of Marine Science*** 69: 497-508.

Thacker RW, Ginsburg DW, Paul VJ. 2001. Effects of herbivore exclusion and nutrient enrichment on coral reef macroalgae and cyanobacteria. ***Coral Reefs*** 19: 318-329.

Paul VJ, Cruz-Rivera E, Thacker RW. 2001. Chemical mediation of seaweed-herbivore interactions: ecological and evolutionary perspectives. Pages 227-265 in: J. McClintock and B. Baker (editors). ***Marine Chemical Ecology***. CRC Press, Boca Raton, Florida.

Hazlett BA, Bach CE, McLay C, Thacker RW. 2000. A comparative study of the defense syndromes of New Zealand marine crustacea. ***Crustaceana*** 73 (8): 899-912.

Thacker RW, Hadfield MG. 2000. A mitochondrial phylogeny of extant Hawaiian tree snails. ***Molecular Phylogenetics and Evolution*** 16: 263-270.

Giménez-Casalduero F, Thacker RW, Paul VJ. 1999. Association of color and feeding deterrence by tropical reef fishes. ***Chemoecology*** 9: 33-39.

Thacker RW, Becerro MA, Lumbang WA, Paul VJ. 1998. Allelopathic interactions between sponges on a tropical reef. ***Ecology*** 79(5): 1740-1750.

Thacker RW. 1998. Avoidance of recently eaten foods by land hermit crabs, *Coenobita compressus*. ***Animal Behavior*** 55: 485-496.

Thacker RW, Nagle DG, Paul VJ. 1997. Effects of repeated exposures to marine cyanobacterial secondary metabolites on feeding by juvenile rabbitfish and parrotfish. ***Marine Ecology Progress Series*** 147: 21-29.

Thacker RW. 1996. Food choices of land hermit crabs (*Coenobita compressus* H. Milne Edwards) depend on past experience. ***Journal of Experimental Marine Biology and Ecology*** 199: 179-191.

Thacker RW. 1994. Volatile shell-investigation cues of land hermit crabs: effect of shell fit, detection of cues from other hermit crab species, and cue isolation. ***Journal of Chemical Ecology*** 20 (7): 1457-1482.

Small MP, Thacker RW. 1994. Land hermit crabs use odors of dead conspecifics to locate shell sources. ***Journal of Experimental Marine Biology and Ecology*** 182: 169-182.

Thacker RW, Hazlett BA, Esman LA, Stafford CP, Keller T. 1993. Color morphs of the crayfish *Orconectes virilis*. ***American Midland Naturalist*** 129 (1): 182-199.

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| **Teaching Experience** |  |

2015-present Department of Ecology & Evolution, Stony Brook University

 **Ecology** (BIO 351)

 **Statistics and Data Analysis** (BIO 211)

 **Undergraduate Research in Ecology & Evolution** (BIO 489)

 **Principles and Applications of Ecology and Evolution** (BEE 576)

 **Seminar: Microbial Symbioses** (BEE 690)

 **Seminar: Metacommunity Ecology** (BEE 690)

2005-present Bocas del Toro Research Station, Smithsonian Tropical Research Institute

 **Taxonomy and Ecology of Caribbean Sponges**

August 2005, July 2006, August 2007, August 2010, August 2012,

July 2016, June 2019

2000-2015 Department of Biology, University of Alabama at Birmingham

 **Molecular Ecology and Phylogenetics** (BY 469 / 669 / 769)

 **Ecology** (BY 470 / 570)

**Limnology** (BY 465 / 565 / 665)

**Techniques in Biological Research** (BY 646)

**Seminar in Ecology: Molecular Ecology** (BY 692/792)

 **Undergraduate Research** (BY 498)

**Undergraduate Honors Research** (BY 499)

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| **Professional Service Activities** |  |

2013-present Editorial Board, *Frontiers in Microbiology*.

2008-2019 Editor, *Invertebrate Biology.*

2012-2014 Program Officer, American Microscopical Society.

2010-2014 Editorial Board, *Integrative and Comparative Biology*.

2011 Session Chair: *Phylogenetic Methods*, Evolution 2011, Norman, Oklahoma.

2010 Organizer and Moderator: *Roundtable on Integrating Morphological and Molecular Systematics*, 8th World Sponge Conference, Girona, Spain.

2010 Session Chair: *Sponge Microbiology*, 8th World Sponge Conference, Girona, Spain.

2010 Session Chair: *Bacterial Symbioses*, 13th International Symposium on Microbial Ecology, Seattle, Washington.

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| Professional Affiliations |  |

American Microscopical Society

American Society of Microbiologists

Ecological Society of America

International Society for Reef Studies

Sigma Xi Scientific Research Society

Society for Integrative and Comparative Biology

Society of Systematic Biologists