DEBORAH JEAN GOCHFELD

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EDUCATION:

Ph.D. Zoology, University of Hawaii, Honolulu, Hawaii. Dec. 1997. Dissertation title: Mechanisms of coexistence between corals and coral-feeding butterflyfishes: territoriality, foraging behavior, and prey defense.

B.A. Biology, *Phi Beta Kappa*, Vassar College, Poughkeepsie, New York. May 1988.

RESEARCH EXPERIENCE:

Senior Scientist, National Center for Natural Products Research, University of Mississippi, Oxford, MS. July 2006-present. Diseases of coral reef organisms. Chemical ecology of marine invertebrates. Phenotypic plasticity in chemical defenses of corals and sponges, particularly as they relate to pathogens and predators. Use of chemical ecology to direct drug discovery efforts from marine resources of Caribbean and Indo-Pacific reefs.

Visiting Scientist, Caribbean Coral Reef Ecosystem Program, Smithsonian Marine Science Network. 2008-present. Prevalence and virulence of sponge diseases in the Caribbean.

Visiting Scientist, Caribbean Marine Research Center, Lee Stocking Island, Bahamas. 2000-present. Chemical ecology, physiology and microbiology of corals and sponges as related to disease and other environmental stressors. Behavioral ecology of sponge- and coral-feeding fishes. Pheromones as signals for sex change in a marine goby. Antimicrobial and antipredator natural products from cave and reef sponges.

Research Scientist, National Center for Natural Products Research and Ocean Biotechnology Center and Repository of the National Institute of Undersea Science and Technology, University of Mississippi, Oxford, MS. Sept. 2001-June 2006. Chemical ecology of marine invertebrates. Phenotypic plasticity in chemical defenses of corals, particularly as they relate to coral pathogens and predators. Use of chemical ecology to direct drug discovery efforts from the marine resources of Jamaica, Belize, Bahamas and U.S. territorial coral reefs.

Postdoctoral Research Fellow, Department of Pharmacognosy, University of Mississippi, Oxford, MS. Sept. 1998-Aug. 2001. National Institutes of Health, National Research Service Award. Training in natural products chemistry, focused on isolation and structure elucidation of antiinfectives from marine invertebrates, and on ecological roles of marine natural products.

Research Assistant, Dept. of Zoology, University of Hawaii, Honolulu, HI. Jun. 1994-Dec. 1996. Environmental impact assessment of benthic communities at sewage outfall sites on Oahu, Hawaii.

Environmental Consultant, United Nations Development Programme, New Ireland, Papua New Guinea. Feb.-Mar. 1996. Ecological assessment of the coral reefs and nearshore environments of Southern New Ireland, Papua New Guinea (primary focus on reef fish diversity and abundance, coral populations, and coral bleaching).

Visiting Researcher, Christensen Research Institute, Madang, Papua New Guinea. Dec. 1995-Mar. 1996, Nov. 1993-Jan. 1994 and June-Aug. 1991. Experimental studies on territoriality and feeding behavior of coral-feeding butterflyfishes. Ecological surveys of butterflyfish populations, coral diversity and coral growth rates for monitoring of environmental degradation.

Participant, National Science Foundation Chemical Ecology Research Cruise, Bahamas, Sept.-Oct. 1994. Experimental analysis of inducible chemical defenses in hard corals and gorgonians. Training in chemical ecology techniques.

Visiting Researcher, University of Guam Marine Laboratory, Guam, Marianas Islands. July 1992. Experimental studies on behavior of territorial grazing damselfishes.

- **Visiting Researcher**, Richard Gump South Pacific Biological Research Station, Moorea, French Polynesia. July-Aug. 1990. Experimental studies on behavior of territorial grazing damselfishes.
- **Laboratory Technician,** Graduate Program in Ecology, Rutgers University, Piscataway, NJ. Jan.-May 1988. Analysis of mercury from three Puerto Rican estuaries
- **Research Assistant**, Dept. of Biology, Vassar College, Poughkeepsie, NY. 1987. Monitored growth and conducted assays for enzyme activity in senescing seagrasses.
- **Research Assistant**, Graduate Program in Ecology, Rutgers Univ., Piscataway, NJ. Summers 1984-1987. Field research on habitat selection and reproductive behavior of seabirds and endangered shorebirds in New York, New Jersey, and Puerto Rico.

TEACHING EXPERIENCE:

- **Instructor**, Department of Pharmacognosy, University of Mississippi, Oxford, MS. Summer 2010. Study abroad course on Adaptations to Stress on Coral Reefs, Bahamas (PHCG 541).
- **Affiliate Faculty**, Environmental Toxicology Graduate Program, School of Pharmacy, University of Mississippi, Oxford, MS. Aug. 2006-present.
- **Graduate Faculty**, Department of Biology, University of South Alabama, Mobile, AL. Nov. 2004-present.
- **Adjunct Faculty**, Department of Biology, University of Mississippi, Oxford, MS. Oct. 2002-present. **Guest Lecturer**, University of Mississippi, Oxford, MS. April 2009. Lectured on Changes in Communities and Ecosystems for graduate-level Introduction to Environmental Toxicology course
 - Communities and Ecosystems for graduate-level Introduction to Environmental Toxicology course (PHCL 547).
- Guest Lecturer, University of Mississippi, Oxford, MS. Feb. 2008, 2009. Lectured on Ecological Impacts of Global Climate Change and their Effects on Ocean Health for graduate course on Global Warming Causes, Impacts and Solutions (ENGR 597).
- **Instructor**, Department of Pharmacognosy, University of Mississippi, Oxford, MS. 2001-2004. Cotaught graduate-level course in Marine Chemical Ecology (PHCG 620).
- **Guest Lecturer**, University of Alabama, Birmingham, AL. 2001-2006. Lectured on Biodiversity of Marine Invertebrates for undergraduate course in Invertebrate Zoology (BY 255).
- **Guest Lecturer**, University of Mississippi, Oxford, MS. Feb. 2003. Lectured on Captain Cook's Legacy on the Pacific Islands for freshman liberal arts course on Science and Society in the Early 20th Century (LIBA 102).
- **Guest Lecturer**, University of Mississippi and American University International Programs, Semester abroad program, Belize. Spring 2000. Lectured on Ecology of Coral Reef Fishes, and assisted in field studies for 10 day field course on Coastal Reef Dynamics of the Belize Barrier Reef.
- **Resident Director**, Hofstra University Marine Laboratory, St. Ann's Bay, Jamaica. Oct. 1997-Sept. 1998. Managed day to day operations of a marine laboratory, including the budget and the Jamaican staff; coordinated and taught marine science courses for visiting high school and college groups from the U.S., Canada and Europe; developed curricula and taught courses on marine ecology, tropical biology and natural history of Jamaica for Elderhostel programs.
- **Adjunct Faculty**, Hawaii Pacific University, Honolulu, HI. Jan.-June 1997. Human Anatomy and Physiology for pre-nursing students.
- **Instructor**, Education Department, Waikiki Aquarium, Honolulu, HI. Summers 1995-1996. Developed course on Ecology of Coral Reef Fish.
- **Teaching Assistant,** Department of Zoology, University of Hawaii, Honolulu, HI. Jan.-June 1994 and Aug. 1988-July 1992. Laboratory sections of Marine Biology, Field Ecology, Introductory Zoology, Human Anatomy and Physiology, Biometry.
- **Instructor**, Docent Training Workshop, Sea Life Park, Waimanalo, HI. Summers 1992-1997. "Introduction to Fish Ecology" as part of annual docent training workshop.
- **Instructor**, Elderhostel Program, University of Hawaii, Honolulu, HI. 1993-1995. "Seabirds of Hawaii".
- **Instructor**, Elderhostel Program, Pacific Islands Institute, Kailua, HI. Summer 1994. "The Underwater World of the South Pacific" and "Coral Reefs in Sickness and in Health".

Natural History Interpreter, Hawaiian Marine Biology Program for Select High School Students, SeaCamp Inc., Kaneohe, HI. Summers 1993-1994. Interpretive snorkeling tours for high school students.

HONORS AND AWARDS:

Invited Speaker, 33rd Eastern Fish Health Workshop, Atlantic Beach, NC, 2008
Site inspection Team, Council for International Educational Exchange Program in Bonaire, Netherlands Antilles. 1-8 Feb. 2008.

Invited Speaker, Mississippi Junior Sciences and Humanities Symposium, University of Mississippi, 2007

President, Sigma Xi Chapter, University of Mississippi, 2005-2006

President Elect, Sigma Xi Chapter, University of Mississippi, 2004-2005

Invited Speaker, Joint Chemistry-Biology Merck-AAAS Undergraduate Research Program Seminar Series, University of South Alabama, 2003

National Research Service Award Fellowship, National Institutes of Health, 1998-2001 (3 yrs)

Best Paper Award, Albert L. Tester Memorial Symposium, University of Hawaii, Apr. 1993

Research Fellowship, Research Corporation of the University of Hawaii, 1991 (1 year)

Phi Beta Kappa, Vassar College, May 1988

Departmental Honors in Biology, Vassar College, May 1988

General Honors, Vassar College, May 1988

Appointment as an Academic Intern, Dept. of Biology, Vassar College, Oct. 1987

GRANTS AND FELLOWSHIPS AWARDED:

- **NSF Biological Oceanography** (PI: D. Gochfeld). 2010-2013. "Collaborative Research: Host-environment-pathogen interactions in a model coral disease system"; \$198,455.
- **NOAA/Ocean Exploration** (PI: M. Slattery, UM Dept. Pharmacognosy; Co-PIs: D. Gochfeld; M. Lesser, U. New Hampshire). 2009-2010. "Ocean Exploration and Biotechnology on Pacific Deep Reefs"; \$266,703.
- **NOAA/NIUST** (PI: D. Gochfeld; Co-PI: J. Rimoldi, UM Dept. Medicinal Chemistry). 2009-2010. "Using Proteomics to Understand Coral and Sponge Immunity to Stress"; \$100,944.
- **FY08 Smithsonian Marine Science Network** (PI: K. Rützler, Natl. Museum of Natural History; Co-PIs: D. Gochfeld, R.W. Thacker, U. Alabama-Birmingham, J. Olson, U. Alabama, C. Diaz, Museo Margarita, Venezuela, E. Villamizar, U. Central de Venezuela). 2008-2010. "Prevalence of *Aplysina* Red Band Syndrome at Carrie Bow Cay, Belize"; \$20,800+facility fees.
- **NSF Biological Oceanography** (PI: D. Gochfeld). 2007-2010. "Collaborative Research: *Aplysina* Red Band Syndrome: Investigating the etiology, pathogenesis, and ecology of an emerging marine disease"; \$231,103.
- NASA (PI: M. Slattery, UM Dept. Pharmacognosy; Co-PIs: D. Gochfeld; A. Boettcher, U. South Alabama). 2007-2008. "Modeling Seagrass Community Change Using Remote Sensing and Real-time Instrument Packages"; \$229,403.
- **University of Mississippi Faculty Research Program** (PI: D. Gochfeld). 2007. "Developing molecular techniques for sponge pathogen identification"; \$7,454.
- **NOAA/National Institute of Undersea Science and Technology** (PI: D. Gochfeld). 2006-2011. "Development of Molecular Tools to Assess Disease Resistance in Corals and Sponges"; \$63,128.
- **NOAA/Ocean Exploration** (PI: M. Slattery, UM Dept. Pharmacognosy; Co-PIs: D. Gochfeld; M. Lesser, U. New Hampshire; J. Olson, U. Alabama). 2006-2008. "New ocean resources:

- exploration and drug discovery in the "twilight zone"." \$369,233. **Selected as a "Signature Exploration". Featured on NOAA's Ocean Exploration website: http://oceanexplorer.noaa.gov/explorations/07twilightzone/welcome.html
- **Nova Southeastern University President's Faculty Research and Development Grant** (PI: P.L. Blackwelder; Collaborator: D. Gochfeld). 2006-2007. "Ultrastructural analysis in the elucidation of disease in reef-building corals." \$10,000.
- **Hawaii Coral Reef Initiative**. (PI: D. Gochfeld; Co-PIs: G. Aeby, Hawaii Institute of Marine Biology; J. Miller, UM Dept. Pharmacognosy). 2005-2006. "Chemical mechanisms of disease resistance in Hawaiian corals." \$31,288.
- **NOAA/National Institute of Undersea Science and Technology** (PI: D. Gochfeld). 2004-2006. "Chemical ecology of the scleractinian coral *Siderastrea siderea*: Chemical resistance to disease and associated microbial communities." \$90,619
- NIH/International Cooperative Biodiversity Group Planning Grant (PI: L. Walker, NCNPR; Co-PIs: D. Gochfeld; D. Pasco, NCNPR; M. Slattery, M. Hamann, UM Dept. Pharmacognosy; N. Quinn, Discovery Bay Marine Laboratory). 2003-2005. "New drugs from marine natural resources of Jamaican reefs." \$346,000
- **NOAA/National Institute of Undersea Science and Technology** (PI: D. Gochfeld). 2003-2004. "Coral Disease and Chemical Resistance Mechanisms" \$30,000
- NOAA/National Undersea Research Program's Caribbean Marine Research Center (PI: M. Slattery, Co-PI: D. Gochfeld). 2002-2004. "Drug development from marine resources of the Bahamas." \$50,000.
- **NOAA/National Institute of Undersea Science and Technology** (PI: D. Gochfeld). 2002-2003. "The role of host chemical resistance in coral diseases." \$10,000
- University of Mississippi Faculty Small Grants Program (PI: D. Gochfeld). 2002-2003. "Antimicrobial activity of scleractinian corals." \$3,000
- NOAA/National Undersea Research Program's Caribbean Marine Research Center Development Grant (PI: D. Gochfeld, Co-PI: M. Slattery). 2002. "Coral diseases and chemical resistance mechanisms." \$8,980
- **University of Mississippi Associates and Partners Grant Program** (PI: D. Gochfeld). 2001. Equipment grant to purchase a digital video camera. \$750
- NIH/National Research Service Award Postdoctoral Fellowship (PI: D. Gochfeld, Co-PI: M. Hamann). 1998-2001. "Antiinfective compounds from Pacific soft corals." \$93,528
- **Sigma Delta Epsilon/Graduate Women in Science's Vessa Notchev Fellowship**. 1995. "Chemical defenses in the hard coral, *Porites compressa*." \$1,000
- American Museum of Natural History's Lerner-Gray Fund for Marine Research Grant. 1994. "Determinants of territory size in a specialist coral-feeding butterflyfish." \$650
- **Sigma Xi Scientific Research Society's Grant-in-Aid of Research**. 1994. "Determinants of territory size in a specialist coral-feeding butterflyfish." \$450
- Western Society of Malacologists' Research Grant. 1993. "Control of populations of the coral-feeding nudibranch, *Phestilla sibogae*, by fish and crustacean predators." \$250
- **Conchologists of America, Inc. Research Grant**. 1993. "Control of populations of the coral-feeding nudibranch, *Phestilla sibogae*, by fish and crustacean predators." \$500
- **University of Hawaii/Graduate Student Organization Travel Grant**. 1992. For travel to the International Coral Reef Symposium in Guam. \$750
- **Research Corporation of the University of Hawaii Research Fellowship**. 1991. "Mechanisms of coexistence between corals and coral-feeding butterflyfishes." \$12,000
- **Sigma Xi Scientific Research Society's Grant-in-Aid of Research**. 1991. "Inducible defenses in the hard coral, *Porites compressa*." \$350
- University of Hawaii/Department of Zoology Edmondson Research Grant. 1991. "Inducible defenses in the hard coral, *Porites compressa*." \$1,000
- American Museum of Natural History's Lerner-Gray Fund for Marine Research Grant. 1991. "Inducible defenses in the hard coral, *Porites compressa*." \$600

PUBLICATIONS:

Invited papers:

- Slattery, M. and **D.J. Gochfeld** Chemical Interactions among Marine Competitors, and Host-Pathogens. Marine Natural Products Science: A Reference Book. Springer, New York. [invited chapter] (submitted 29 March 2010; revision submitted 25 May 2010)
- **Gochfeld, D.J.**, J.B. Olson and M. Slattery. 2006. Colony versus population variation in susceptibility and resistance to Dark Spot Syndrome in the Caribbean coral *Siderastrea siderea*. Diseases of Aquatic Organisms 69:53-65.
- Slattery, M. and **D.J. Gochfeld**. 2003. Chemical ecology of marine bacteria and algae. In: Encyclopedia of Life Support Systems (EOLSS), UNESCO, EOLSS Publishers, Oxford ,UK, [http://www.eolss.net]

Peer-reviewed articles:

- Ankisetty, S., **D.J. Gochfeld**, M.C. Diaz, S. Khan and M. Slattery. Chemistry of the deep reef Caribbean sponges *Plakortis angulospiculatus* and *Plakortis halichondrioides*. Journal of Natural Products. (submitted 15 March 2010; acccepted pending revision 9 June 2010.)
- **Gochfeld, D.J.** 2010. Territorial damselfishes facilitate survival of rare corals by providing an associational refuge from predation. Marine Ecology Progress Series 398:137-148.
- Renegar, D.A., P.L. Blackwelder, J.D. Miller, **D.J. Gochfeld** and A.L. Moulding. In press. Ultrastructural and histological analysis of Dark Spot Syndrome in *Siderastrea siderea* and *Agaricia agaricites*. Proceedings of the 11th International Coral Reef Symposium, Ft. Lauderdale, Florida, July 2008: 185-189.
- **Gochfeld, D.J.** and J.B. Olson. 2009. A novel feeding behavior by an ambush predator on toxic prey. Coral Reefs 28:155.
- Slattery, M., H.N. Kamel, S. Ankisetty, **D.J. Gochfeld**, C.A. Hoover and R.W. Thacker. 2008. Hybrid vigor in a Pacific soft coral community. Ecological Monographs 78:423-443.
- Gochfeld, D.J. and G.S. Aeby. 2008. Antimicrobial chemical defenses in Hawaiian corals: possible protection from disease? Marine Ecology Progress Series 362:119-128.
- Gochfeld, D.J., C. Schlöder, and R.W. Thacker. 2007. Sponge Community Structure and Disease Prevalence on coral reefs in Bocas del Toro, Panama. In: Custódio, MR, Lõbo-Hajdu, G, Hajdu E, Muricy G (eds.) *Porifera Research: Biodiversity, Innovation, and Sustainability*. Série Livros 28. Museu Nacional, Rio de Janeiro. Pp. 335-343.
- Olson, J., **D. Gochfeld** and M.Slattery. 2006. *Aplysina* red band syndrome: a new threat to Caribbean sponges. Diseases of Aquatic Organisms 71:163-168.
- Quinn, N.J., **D. Gochfeld**, M.T. Hamann, M. Slattery, L. Walker and B.L. Kojis. 2006. Documenting and conserving biodiversity of Jamaican coral reefs while exploring for pharmacologically interesting natural products. Proceedings of the 10th International Coral Reef Symposium 3:800-809.
- Slattery, M., **D.J. Gochfeld** and H.N. Kamel. 2005. Hybrid Soft Coral Aquaculture to Produce Novel "Pharmaceutical Factories". Global Aquaculture Advocate 8:42-43.
- **Gochfeld, D.J.** 2004. Predation-induced morphological and behavioral defenses in a hard coral: implications for foraging behavior of coral-feeding butterflyfishes. Marine Ecology Progress Series 267:145-158.
- **Gochfeld, D.J.**, K.A. El Sayed, M. Yousaf, J. Hu, P. Bartyzel, D.C. Dunbar, S.P. Wilkins, J.K. Zjawiony, R.F. Schinazi, S.S. Wirtz, P.M. Tharnish and M.T. Hamann. 2003. Anti-HIV

- activity of structurally diverse marine natural products: a review. Mini Reviews in Medicinal Chemistry. 3:401-424.
- **Gochfeld, D.J.** and M.T. Hamann. 2001. The isolation and biological evaluation of filiformin, plakortide F and plakortone G from the Caribbean sponge *Plakortis* sp. Journal of Natural Products 64:1477-1479.
- **Gochfeld, D.J.** and D.T. Minton. 2001. When to move and where to go: movement behavior of the Caribbean littorinid *Cenchritis muricatus*. Journal of Shellfish Research 20:447-452.
- Minton, D.T. and **D.J. Gochfeld**. 2001. Is life on the tropical shore really so hard?: the role of abiotic factors in structuring a supralittoral molluscan assemblage. Journal of Shellfish Research 20:477-483.
- Gochfeld, M., **D.J. Gochfeld**, D. Minton, B.G. Murray Jr., P. Pyle, N. Seto, D. Smith and J. Burger. 1999. Metals in feathers of Bonin Petrel, Christmas Shearwater, Wedge-tailed Shearwater and Red-tailed Tropicbird in the Hawaiian Islands, Northern Pacific. Environmental Monitoring and Assessment 59:343-358.
- **Gochfeld, D.J.** and G.S. Aeby. 1997. Control of populations of the coral-feeding nudibranch, *Phestilla sibogae*, by coral reef fishes and crustaceans. Marine Biology 130:63-70.
- Burger, J., K. Cooper, J. Saliva, **D. Gochfeld**, D. Lipsky and M. Gochfeld. 1992. Mercury bioaccumulation in organisms from three Puerto Rican estuaries. Environmental Monitoring and Assessment 22:181-197.
- Burger, J., K. Cooper, **D.J. Gochfeld**, J.E. Saliva, C. Safina, D. Lipsky, and M. Gochfeld. 1992. Dominance of *Tilapia mossambica*, an introduced fish species, in three Puerto Rican estuaries. Estuaries 15:239-245.
- Burger, J., M. Gochfeld, J.E. Saliva, **D.J. Gochfeld**, D.A. Gochfeld, and H. Morales. 1991. Habitat use by nesting Zenaida doves (*Zenaida aurita*) in Puerto Rico: avoidance of islands without nesting seabirds. Ornis Scandinavica 22:367-374.
- **Gochfeld, D.J.** 1991. Energetics of a predator-prey interaction: corals and coral-feeding fishes. Pacific Science 45:246-256.
- Burger, J., M. Gochfeld, J.E. Saliva, **D. Gochfeld**, D. Gochfeld, and H. Morales. 1989. Antipredator behaviour in nesting Zenaida doves (*Zenaida aurita*): parental investment or offspring vulnerability. Behaviour 111:129-143.
- Burger, J., M. Gochfeld, **D.J. Gochfeld**, and J. Saliva. 1989. Nest site selection in Zenaida dove (*Zenaida aurita*) in Puerto Rico. Biotropica 21:244-249.
- Gochfeld, M., J. Burger, J. Saliva, and **D. Gochfeld**. 1988. Herald petrel new to the West Indies. American Birds 42:1254-1258.

Published reports:

- Starmer, J., J. Asher, F. Castro, D. Gochfeld, J. Gove, A. Hall, P. Houk, E. Keenan, J. Miller, R. Moffit, M. Nadon, R. Schroeder, E. Smith, M. Trianni, P. Vroom, K. Wong and K. Yuknavage. 2008. The state of coral reef ecosystems of the Commonwealth of the Northern Mariana Islands. pp. 437-463. In: J.E. Waddell and A.M. Clarke (eds.), The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States: 2008. NOAA Technical Memorandum NOS NCCOS 73. NOAA/NCCOS Center for Coastal Monitoring and Assessment's Biogeography Team. Silver Spring, MD. 569 pp.
- **Gochfeld, D.J.** 1998. Annotated guide to fishes in nearshore reef habitats of St. Ann's Bay, Jamaica. Hofstra University Marine Laboratory, Publication No. 24A. 44 pp.
- Gochfeld, D.J. 1996. Coral reefs and associated fishes of southern New Ireland. Pp 36-52. In: C. Hair (ed.), Lak Marine Survey: An Ecological Assessment of the Coral Reef and Near Shore Environments of Southern New Ireland, Papua New Guinea. Dept. of Environment and Conservation, United Nations Development Programme OPS-PNG/93/G31.
- Hopper, D. and **D. Gochfeld**. 1995. Tuna cannery threatens coral reef in Papua New Guinea. Reef Encounter 17:13.

Published abstracts:

- Gochfeld, D.J., J. Weston and M. Slattery. 2010. Effects of industrial discharge and pharmaceuticals on sea urchin development. pp. 652-653. In: Harris, L.G., S.A. Böttger, C.W. Walker and M.P. Lesser (eds.), Echinoderms: Durham. CRC Press, Boca Raton.
- **Gochfeld, D.** and H. Kamel. 2008. The effect of *Aplysina* Red Band Syndrome on secondary metabolite production in the sponge *Aplysina cauliformis*. Planta Medica 2008:74.
- Renegar, D.A., P.L. Blackwelder and **D.J. Gochfeld**. 2007. Ultrastructural analysis in the elucidation of disease in corals. Microscopy and Microanalysis 13(Suppl 2):272-273CD.
- **Gochfeld, D.,** J. Miller and J.B. Olson. 2006. Variability in susceptibility and response to Dark Spot Syndrome in *Siderastrea siderea*. EOS Transactions American Geophysical Union, 87(36), Ocean Science Meeting Supplement, Abstract OS26G-15.
- Miller, J., J.B. Olson and **D. Gochfeld.** 2006. Histological examination of *Siderastera siderea* affected by Dark Spot Syndrome. EOS Transactions American Geophysical Union, 87(36), Ocean Science Meeting Supplement, Abstract OS26G-14.
- **Gochfeld, D.**, L. Harrison, J. Olson, M.P. Lesser, S. Ankisetty and M. Slattery. 2006. Allelopathic effects of the Caribbean sponge *Svenzea zeai* on the coral *Montastraea annularis*. Rio de Janiero Museu Nacional Serie Livros 16:116.
- **Gochfeld, D.**, M. Slattery and J. Olson. 2006. *Aplysina* Red Band Syndrome: a new condition affecting Caribbean sponges. Rio de Janiero Museu Nacional Serie Livros 16:117.
- Schloeder, C., R.W. Thacker and D. Gochfeld. 2006. Effect of anthropogenic disturbance on sponge community structure and disease incidence. Rio de Janiero Museu Nacional Serie Livros 16:136.
- Slattery, M., **D.Gochfeld** and M.P. Lesser. 2006. Ecology and bioactivity of deep-reef sponge communities in the Bahamas. Rio de Janiero Museu Nacional Serie Livros 16:138.
- **Gochfeld, D.** 2006. Use and misuse of butterflyfishes as indicators of coral reef health. Marine Environmental Research 62:S387.
- Slattery, M., **D.J. Gochfeld**, P. Houk, L.R. Harrison, A. Chaudhary and K. Willett. 2006. Effects of environmental estrogens on populations of the tropical Pacific soft coral *Sinularia polydactyla*. Marine Environmental Research 62:S267.
- Gochfeld, D.J., M.T. Hamann, B.A. Avery, K.E. Marsh, R.W. Thacker and M.Slattery. 2002. Chemical variability and ecological activity of compounds from the Caribbean sponge *Plakortis* sp. Bull. Mus. Ist. Biol. Univ. Genova 66-67:81.
- Slattery, M., **D.J. Gochfeld**, T. Iliffe, B. Kakuk and M. Kelly. 2002. Biodiversity and competitive interactions of cave sponges in the Bahamas. Bull. Mus. Ist. Biol. Univ. Genova 66-67:184.
- Minton, D. and **D.J. Gochfeld**. 2000. Effect of nutrient enrichment from bird guano on mangrove root-associated communities. Pacific Science 54:99.
- **Gochfeld, D.J.** 1994. Predation-induced defenses in hard corals reduce susceptibility to future predation. Pacific Science 48:203.
- **Gochfeld, D.J.** 1992. Feeding preferences of coral-feeding fishes as possible indicators of levels of prey defense. Proceedings of the Seventh International Coral Reef Symposium, Guam. 2:875.
- **Gochfeld, D.J.** 1992. Corals benefit from territorial defense by the herbivorous damselfish, *Stegastes nigricans*, in Moorea, French Polynesia. Pacific Science 46:93.

PRESENTATIONS AT SCIENTIFIC MEETINGS:

Gochfeld, D.J., Pappas, K.E. and G.S. Aeby. Disease resistance in corals: implications for production of antibacterial chemical defenses. International Marine Biotechnology Conference, Qingdao, China, 8-12 October 2010. Abstract submitted 25 May 2010.

- **Gochfeld, D.J.**, C.G. Easson, C. Freeman, R.W. Thacker and J.B. Olson. Impacts of nutrient enrichment and disease on the Caribbean sponge *Aplysina cauliformis* and its cyanobacterial symbionts. International Sponge Symposium, Girona, Spain, 20-24 September 2010. Abstract accepted 28 June 2010.
- **Gochfeld, D.J.,** Kamel, H.N., J.B. Olson and R.W. Thacker. Altered secondary metabolite production in *Aplysina cauliformis* in response to infection by *Aplysina* Red Band Syndrome. International Sponge Symposium, Girona, Spain, 20-24 September 2010. Abstract accepted 28 June 2010.
- Easson, C., **D.J. Gochfeld**, M. Slattery, J.B. Olson and R.W. Thacker. Mapping impacts of disease on sponge communities using Geographic Information Systems (GIS). International Sponge Symposium, Girona, Spain, 20-24 September 2010. Abstract accepted 28 June 2010.
- Villamizar, E., M.C. Díaz, K. Ruetzler, R.W. Thacker, **D.J. Gochfeld**, and J.B. Olson. Evaluation and Monitoring of the Sponge Community Health Condition in Carrie Bow Reef, Belize. International Sponge Symposium, Girona, Spain, 20-24 September 2010. Abstract accepted 28 June 2010.
- Diaz, M.C.D., R.W.M. van Soest, **D.J. Gochfeld**, J.B. Olson, M. Slattery, and M.P. Lesser. A checklist from shallow and mesophotic Marine sponges from Little Cayman Island. International Sponge Symposium, Girona, Spain, 20-24 September 2010. Abstract accepted 28 June 2010.
- Olson, J.B., X. Gao, **D.J. Gochfeld** and R.W. Thacker. Infection by *Aplysina* Red Band Syndrome alters sponge-associated bacterial communities. International Sponge Symposium, Girona, Spain, 20-24 September 2010. Abstract accepted 28 June 2010.
- Slattery, M., **D.J. Gochfeld**, M.C. Diaz, M.P. Lesser and J.B. Olson. Sponge biodiversity of mesophotic coral reefs and their biotechnology implications. International Sponge Symposium, Girona, Spain, 20-24 September 2010. Abstract accepted 28 June 2010.
- Olson, J.B., X. Gao, **D.J. Gochfeld** and R.W. Thacker. Impact of disease on sponge-associated bacterial communities. International Symposium on Microbial Ecology, Seattle, WA, Aug. 2010. Abstract accepted 15 March 2010.
- Thacker, R.W., J.B. Olson and **D.J. Gochfeld**. Facultative mutualists and opportunistic colonists: symbiotic cyanobacteria associated with the marine sponge *Aplysina cauliformis*. International Symposium on Microbial Ecology, Seattle, WA, Aug. 2010. Abstract accepted 15 March 2010.
- Olson, J.B., X. Gao, **D.J. Gochfeld** and R.W. Thacker. *Aplysina* Red Band Syndrome: Characterization of the associated bacterial communities. Benthic Ecology Meeting, Wilmington, NC, 13-17 March 2010.
- Gochfeld, D.J., C.G. Easson, L. Krentz, K.E. Pappas, C. Freeman, R.W. Thacker and J.B. Olson. Effects of nutrient enrichment and disease on the Caribbean sponge *Aplysina cauliformis*. Ocean Sciences Meeting, Portland, OR, 22-26 February 2010.
- Easson, C.G., R.W. Thacker, J.B. Olson, M. Slattery, K. Willett, A. Boettcher and **D.J. Gochfeld**. Effects of nutrient enrichment on competition between the alga *Microdictyon marinum* and the sponge *Aplysina cauliformis*. Society for Environmental Toxicology and Chemistry Meeting, New Orleans, LA, 19-23 Nov. 2009.
- Krentz, L., K. E. Marsh, **D.J. Gochfeld**, K.L. Willett and M. Slattery. Effects of BaP and EE2, alone and in mixture, on sex change in the bridled goby, *Coryphopterus glaucofraenum*. Society for Environmental Toxicology and Chemistry Meeting, New Orleans, LA, 19-23 Nov. 2009.

- Thacker, R.W., **Gochfeld, D.J.**, and J.B. Olson. Evolution of parasitism and mutualism in sponge-cyanobacteria symbioses. 6th International Symbiosis Society Congress, Madison, WI, 9-15 August 2009.
- **Gochfeld, D.J.** and H.N. Kamel. Use of chemical fingerprinting to compare defensive metabolite production in healthy and diseased sponges. American Society of Pharmacognosy Meeting, Honolulu, HI, 27 June-2 July 2009.
- **Gochfeld, D.J.**, G.S. Aeby and K.E. Pappas. Antibacterial chemical defenses in Hawaiian and Caribbean corals provide resistance to potential pathogens. American Society of Pharmacognosy Meeting, Honolulu, HI, 27 June-2 July 2009.
- Slattery, M., S. Ankisetty, H. Kamel, **D.J. Gochfeld**, D. Ferreira, J. Rimoldi and J.B. Olson. Can marine ecology guide natural products discovery efforts? American Society of Pharmacognosy Meeting, Honolulu, HI, 27 June-2 July 2009.
- Thacker, R.W., **D.J. Gochfeld** and J.B. Olson. *Aplysina* Red Band Syndrome: An infectious disease of coral reef sponges. Association of Southeastern Biologists Meeting, Birmingham, AL, 1-4 April, 2009.
- **Gochfeld, D.J.,** K.E. Pappas, S. Ankisetty and M. Slattery. Widespread but selective antibacterial chemical defenses among Caribbean corals. Benthic Ecology Meeting, Corpus Christi, TX, 4-7 March, 2009.
- Easson, C.G., J.B. Olson, A. Mobley, R.W. Thacker and **D.J. Gochfeld**. Impact of nutrient enrichment on the Caribbean sponge *Aplysina cauliformis*. Benthic Ecology Meeting, Corpus Christi, TX, 4-7 March, 2009.
- Krentz, L., **D. Gochfeld** and M. Slattery. Do cave sponge communities facilitate nearby coral reef community diversity? Benthic Ecology Meeting, Corpus Christi, TX, 4-7 March, 2009.
- Ehmen, B., E. Goldman, C. May, A. Boettcher, A. Morris, **D. Gochfeld**, M. Slattery and H. MacIntyre. Assessment of habitat and population structure of seagrasses at Grand Bay National Estuarine Research Reserve. Southern Section of American Society of Plant Biologists meeting, Austin, TX, 28 February-2 March, 2009.
- Thacker, R.W., **D.J. Gochfeld** and J.B. Olson. *Aplysina* Red Band Syndrome: An emerging infectious disease of coral reef sponges. Society for Integrative and Comparative Biology Annual Meeting, Boston, MA, 3-7 January, 2009.
- **Gochfeld, D.J.,** C.G. Easson, J.B. Olson, R.W. Thacker, A. Mobley and C.M. Schlöder. Organismal-and community-level impacts of stressors on Caribbean coral reef sponges. 29th Society of Environmental Toxicology and Chemistry Annual Meeting, Tampa, FL, 16-20 November, 2008.
- Slattery, M., K.L. Willett, **D.J. Gochfeld,** J. Weston, C. Easson, G. Easson, J. Janaskie, A. Boettcher, B. Ehmen and C.A. May. Impacts of Hurricane Katrina on seagrass beds in Grand Bay, Mississippi. 29th Society of Environmental Toxicology and Chemistry Annual Meeting, Tampa, FL, 16-20 November, 2008.
- Ehmen, B., E. Goldman, C. May, A. Boettcher, **D. Gochfeld**, M. Slattery, H. MacIntyre. Predicting suitable seagrass habitat at Grand Bay National Estuarine Research Reserve. Mississippi-Alabama Bays & Bayous Symposium, Biloxi, MS, 28-29 October, 2008.
- **Gochfeld, D.J.,** R.W. Thacker and J.B. Olson. Emerging infectious diseases of coral reef sponges: *Aplysina* Red Band Syndrome on Caribbean reefs. 11th International Coral Reef Symposium, Fort Lauderdale, FL, 7-11 July 2008.
- **Gochfeld, D.J.** and H.N. Kamel. A comparison of defensive metabolite production in healthy and diseased sponges. International Coral Reef Symposium, Ft. Lauderdale, FL, 7-11 July 2008.

- **Gochfeld, D.J.**, G.S. Aeby and K.E. Pappas. Antibacterial chemical defenses in corals: widespread but selective resistance to bacterial pathogens. 11th International Coral Reef Symposium, Fort Lauderdale, FL, 7-11 July 2008.
- Renegar, D.A., P.L. Blackwelder, **D.J. Gochfeld**, A.L. Moulding. Ultrastructural and Histological Analysis of Dark Spot Syndrome (DSS) in *Siderastrea siderea* and *Agaricia* spp. 11th International Coral Reef Symposium, Fort Lauderdale, FL, 7-11 July 2008.
- Slattery, M., M.P. Lesser, S. Ankisetty and **D.J. Gochfeld.** Phenotypic plasticity in chemical defense and growth across a depth gradient in Caribbean sponges. 11th International Coral Reef Symposium, Fort Lauderdale, FL, 7-11 July 2008.
- **Gochfeld, D.** and H. Kamel. The effect of *Aplysina* Red Band Syndrome on secondary metabolite production in *Aplysina cauliformis*. American Society of Pharmacognosy Interim Meeting, 12-16 April 2008.
- **Gochfeld, D.J.**, G.S. Aeby and K.E. Pappas. Antibacterial chemical defenses in corals: widespread but selective resistance to bacterial pathogens. 33rd Eastern Fish Health Workshop, Atlantic Beach, NC, 31 March-4 April 2008. <u>Invited talk.</u>
- Renegar, D.A., P.L. Blackwelder and **D.J. Gochfeld**. Ultrastructural analysis in the elucidation of disease in coral. Microscopy and Microanalysis 2007, Ft. Lauderdale, FL, 5-9 August 2007.
- **Gochfeld, D.J.** and G.S. Aeby. Are patterns of disease in Hawaiian corals related to antimicrobial chemical defenses? Benthic Ecology Meeting, Atlanta, GA, 21-25 March 2007.
- Olson, J.B. and **D.J. Gochfeld**. Molecular ecology of the scleractinian coral *Siderastrea siderea*: impacts of disease on associated microbial communities. Benthic Ecology Meeting, Atlanta, GA, 21-25 March 2007.
- **Gochfeld, D.J.**, G.S. Aeby and J.D. Miller. Antibacterial activity of Hawaiian corals: possible protection from disease? American Geophysical Union Fall Meeting, San Francisco, CA, 11-15 December 2006.
- Slattery, M., **D. Gochfeld** and M. Lesser. Ocean exploration and drug discovery in the twilight zone. American Geophysical Union Fall Meeting, San Francisco, CA, 11-15 December 2006.
- **Gochfeld, D.J**. Assessing coral reef health: the use of butterflyfishes as indicator species. Society of Environmental Toxicology and Chemistry 27th Annual Meeting, Montreal, Canada, 5-9 November 2006.
- Renegar, D.A., P.L. Blackwelder, **D.J. Gochfeld**, K.B. Ritchie, A.L. Moulding, B.M. Riegl, D.A. Portnoy and H. Alsayegh. Ultrastructural analysis in the elucidation of disease in reef-building corals. International Society for Reef Studies European Meeting, Bremen, Germany, 19-22 September 2006.
- Olson, J.B. and **D.J. Gochfeld**. Molecular ecology of the scleractinian coral *Siderastrea siderea*: Impacts of disease on associated microbial communities. 11th International Symposium on Microbial Ecology, Vienna, Austria, August 2006.
- **Gochfeld, D.J.,** J. Weston and M. Slattery. Effects of Industrial Discharge and Pharmaceuticals on Sea Urchin Development. International Echinoderm Conference, Durham, New Hampshire, 7-11 August 2006.
- **Gochfeld, D.**, M. Slattery and J.B. Olson. *Aplysina* red band syndrome: a new condition affecting Caribbean sponges. 7th International Sponge Symposium, Buzios, Brazil, 7-13 May 2006.
- Schlöder, C., R. Thacker and **D. Gochfeld**. Effect of Anthropogenic Disturbance on Sponge Community Structure and Disease Incidence. 7th International Sponge Symposium, Buzios, Brazil, 7-13 May 2006.

- **Gochfeld, D.J.**, L. Harrison, J. Olson, M.P. Lesser, S. Ankisetty and M. Slattery. Allelopathic effects of the Caribbean sponge *Svenzea zeai* on the coral *Montastraea annularis*. 7th International Sponge Symposium, Buzios, Brazil, 7-13 May 2006..
- Slattery, M., **D. Gochfeld** and M.P. Lesser. Ecology and bioactivity of Deep-Reef Sponge Communities in the Bahamas. 7th International Sponge Symposium, Buzios, Brazil, 7-13 May 2006.
- **Gochfeld, D.**, J. Miller and J.B. Olson. Variability in susceptibility and response to Dark Spot Syndrome in *Siderastrea siderea*. 13th Ocean Sciences Meeting, Honolulu, Hawaii, 20-24 February 2006.
- Miller, J., J.B. Olson and **D. Gochfeld**. Histological Examination of *Siderastrea siderea* Affected by Dark Spot Syndrome. 13th Ocean Sciences Meeting, Honolulu, Hawaii, 20-24 February 2006.
- Purcell, J., M. Slattery and **D. Gochfeld**. Determining the Bioactivity of a Marine Sponge Extract Against *Leishmania*. Annual Biomedical Research Conference for Minority Students, Atlanta, Georgia, 2-4 November 2005. Won Best Senior Chemistry Poster Award.
- Gochfeld, D.J, B.A. Avery, K.E. Marsh, R.W. Thacker and M. Slattery. Chemical ecology of Caribbean sponges: habitat-specific variability in chemical defenses. American Society of Pharmacognosy Meeting, Corvallis, OR, 23-27 July 2005.
- Slattery, M., **D.J. Gochfeld**, S. Ankisetty, J. Miller, J.R. Rimoldi, K.L. Willett, T.J. Smilie, M.R. Jacob, A.M. Best, W.R. Chambliss and L. Walker. The NIUST Ocean Biotechnology Center & Repository. American Society of Pharmacognosy Meeting, Corvallis, OR, 23-27 July 2005.
- **Gochfeld, D.J.** Use and misuse of butterflyfishes as indicators of coral reef health. 13th International Symposium on Pollution Responses in Marine Organisms, Allessandria, Italy, 19-22 June 2005.
- Slattery, M., **D.J. Gochfeld**, P. Houk, L.R. Harrison, A. Chaudhary and K. Willett. Effects of environmental estrogens on populations of the tropical Pacific soft coral *Sinularia polydactyla*. 13th International Symposium on Pollution Responses in Marine Organisms, Allesandria, Italy, 19-22 June 2005.
- Slattery, M., H.N. Kamel, **D.J. Gochfeld**, S. ElShahawi & S. Ankisetty. Hybridization in Drug Discovery: Novel Biogenic Metabolite Production. International Marine Biotechnology Conference, St. John, Canada, 7-12 June 2005.
- Olson, J., **D. Gochfeld** and M.Slattery. *Aplysina* red band disease: a new sponge disease in the Caribbean. 34th Benthic Ecology Meeting, Williamsburg, VA, 6-10 April 2005.
- **Gochfeld, D.**, M. Slattery, M.T. Hamann, K. Sullivan, N. Quinn and L. Walker. New drugs from marine natural resources of Jamaican reefs: development of an International Cooperative Biodiversity Group program. International Congress on Natural Products Research, Phoenix, AZ, 31 July-4 Aug. 2004.
- Slattery, M., H. Kamel, **D.J. Gochfeld**, S. Elshahawi and S. Ankisetty. Hybridization in soft corals: genetic recombinations result in novel biogenic metabolites. International Congress on Natural Products Research, Phoenix, AZ, 31 July-4 Aug. 2004.
- **Gochfeld, D.J.**, J.B. Olson, K.E. Marsh and M. Slattery. Temporal changes in susceptibility to Dark Spot Syndrome in the Caribbean coral *Siderastrea siderea*. 10th International Coral Reef Symposium, Okinawa, Japan, 28 June-2 July 2004.
- Slattery, M., H.N. Kamel, **D.J. Gochfeld** & R.W. Thacker. Chemical resistance in the hybrid soft coral Sinularia maxima x S. polydactyla. 10th Intl Coral Reef Symposium, Okinawa, Japan, 28 June to 2 July 2004.

- Quinn, N., N.D. Ferguson, **D. Gochfeld**, M.T. Hamann, M. Slattery, J.I. Stephenson, L. Walker, B.L. Kojis. Exploring pharmacologically interesting natural products from the coral reefs of Jamaica. 10th International Coral Reefs Symposium, Okinawa, Japan, 28 June-2 July 2004.
- Olson, J.B. and **D. Gochfeld**. A Comparison of Microbial Cultivation Techniques from Corals: Implications for the Identification of Coral Pathogens. 33rd Benthic Ecology Meeting, Mobile, AL, 25-28 March 2004.
- Slattery, M., **D. Gochfeld** and R. Thacker. Phenotypic plasticity and hybridization in drug discovery: soft coral chemical resistance. World Aquaculture Society Meeting, Hawaii, 1-5 March 2004.
- Slattery, M., **D. Gochfeld**, J. Weston, G. Hines and J. Starmer. Spawning Synchrony in the Soft Coral *Sinularia polydactyla* and the Effects of Estrogenic Compounds. 24th Society of Ecological Toxicology and Chemistry Meeting (international), Austin, TX, 8-13 November 2003.
- Slattery, M., H. Kamel, **D.J. Gochfeld** and R.W. Thacker. Chemical Resistance in the hybrid soft coral, *Sinularia maxima* x *S. polydactyla*. International Symposium on the Chemistry and Biology of Marine Organisms, Kolympari, Crete, Greece, 21-26 September 2003.
- **Gochfeld, D.J.**, K.E. Marsh and M. Slattery. Antimicrobial activity of the Caribbean reef coral *Siderastrea siderea* and temporal changes in susceptibility to Dark Spot Syndrome. Benthic Ecology Meeting, Groton, CT, 27-30 March 2003.
- Gochfeld, D.J., M. Slattery, J. Weston and T. McClanahan. Inducible defenses in hard corals: a natural experiment in Kenyan marine parks. Benthic Ecology Meeting, Groton, CT, 27-30 March 2003.
- Marsh, K.E., **D.J. Gochfeld**, and M. Slattery. Evidence for pheromonal mediation of sex change in a protogynously hermaphroditic reef fish. Benthic Ecology Meeting, Groton, CT, 27-30 March 2003.
- Slattery, M., **D.J. Gochfeld**, K.E. Marsh, B.C. DeBusk and D. Schlenk. The chemical arms race and flamingo tongue prey preferences. Benthic Ecology Meeting, Groton, CT, 27-30 March 2003.
- **Gochfeld, D.J.**, M.T. Hamann, B.A. Avery, K.E. Marsh, R.W. Thacker and M. Slattery. Chemical variability and ecological activity of compounds from the Caribbean sponge *Plakortis* sp. 6th Sponge Conference, Genoa, Italy, 29 Sept.-5 Oct. 2002.
- Slattery, M., **D J. Gochfeld**, T. Iliffe, B. Kakuk, and M. Kelly. Biodiversity and Competitive Interactions of Cave Sponges in the Bahamas. 6th Sponge Conference, Genoa, Italy, 29 Sept.-5 Oct. 2002.
- **Gochfeld, D**. and M. Slattery. Coral diseases and chemical resistance mechanisms. 43rd American Society of Pharmacognosy Meeting, New Brunswick, NJ, 27-31 July 2002.
- Gochfeld, D.J. and M.Slattery. Chemical ecology of reef and cave sponges of the Bahamas: predator deterrent vs. antimicrobial activity. 31st Benthic Ecology Meeting, Orlando, FL, March 2002
- **Gochfeld, D.J.**, M.T. Hamann, B.A. Avery and M. Slattery. Environment-specific variability in bioactivity and chemistry of the Caribbean sponge *Plakortis* sp. American Society of Pharmacognosy Meeting, Oaxaca, Mexico. July 2001
- Minton, D. and **D.J. Gochfeld**. Multiple phase shifts in a mangrove benthic community as a result of guanofication by cattle egrets (*Bubulcus ibis*). Western Society of Naturalists Meeting, Portland, OR. Dec. 2000
- Zjawiony, J.K., I. Katsuyama, M.T. Hamann, **D.J. Gochfeld** and J. Hu. Conjugate addition of sulfur nucleophiles to marine natural product puupehenone. International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, HI. Dec. 2000
- **Gochfeld, D.J.**, M. Slattery, B.A. Avery and M.T. Hamann. Site- and depth-specific variability in the chemistry of the Caribbean sponge *Plakortis* sp. Ninth International Coral Reef Symposium, Bali, Indonesia. Oct. 2000
- Slattery, M., **D.J. Gochfeld**, B.C. DeBusk, G.R. Gaston and D.K. Schlenk. Chemical and structural defenses mediate gorgonian prey preference of *Cyphoma gibbosum*. Ninth International Coral Reef Symposium, Bali, Indonesia. Oct. 2000

- **Gochfeld, D.J.**, B.A. Avery and M.T. Hamann. Chemical deterrence in hard corals of the genus *Porites*. 29th Benthic Ecology Meeting, Wilmington, NC. March 2000
- **Gochfeld, D.J.** and M.T. Hamann. Antimalarial compounds from the Caribbean sponge *Plakortis* sp. Gordon Research Conference on Marine Natural Products, Ventura, CA. Feb. 2000
- Gochfeld, D.J. and D.T. Minton. When to move and where to go: movement behavior of the Caribbean Littorinid, *Cenchritis muricatus*. Sixth International Symposium on Littorinid Biology, Jamaica. July 1999
- Minton, D. and **D. Gochfeld**. Is life on the rocky shore really so hard? Sixth International Symposium on Littorinid Biology, Jamaica. July 1999
- Gochfeld, D.J. Effect of food reduction on territoriality in two specialist coral-feeding butterflyfishes. Western Society of Naturalists Meeting, La Paz, Mexico. Dec. 1997
- **Gochfeld, D.J.** Chemical defense in the hard coral, *Porites compressa*. Eighth International Coral Reef Symposium, Panama. June 1996
- Aeby, G.S. and **D.J. Gochfeld**. Control of populations of a coral-feeding nudibranch by fish and crustacean predators. Eighth International Coral Reef Symposium, Panama. June 1996
- Gochfeld, D.J. Evidence for inducible defenses in hard corals. 24th Benthic Ecology Meeting, Rutgers University, Piscataway, NJ. March 1995
- **Gochfeld, D.J.** Effect of reducing coral cover on territoriality in a specialist coral-feeding butterflyfish. Ecological and Evolutionary Ethology of Fishes Meeting, University of Victoria, British Columbia, Canada. May 1994
- **Gochfeld, D.J.** Territorial damselfishes provide associational refuge for corals. 23rd Benthic Ecology Meeting, Mystic, CT. March 1994
- Gochfeld, D.J. Changes in feeding behavior of coral-feeding butterflyfishes in response to increased prey defense. American Society of Ichthyologists and Herpetologists Meeting, University of Texas, Austin, TX. June 1993
- **Gochfeld, D.J.** Predation-induced defenses in hard corals reduce susceptibility to future predation. Albert L. Tester Memorial Symposium, University of Hawaii, Honolulu, HI. Apr. 1993. Won Best Paper Award.
- Gochfeld, D.J. Feeding preferences of coral-feeding fishes as possible indicators of levels of prey defense. Seventh International Coral Reef Symposium, Guam. June 1992
- Gochfeld, D.J. Corals benefit from territorial defense by the herbivorous damselfish, *Stegastes nigricans*, in Moorea, French Polynesia. Pacific Science Congress, Honolulu, HI. Aug. 1991
- **Gochfeld, D.J.** Energetics of a predator-prey interaction: corals and coral-feeding fishes. Ecological & Evolutionary Ethology of Fishes Meeting, Northern Arizona Univ., Flagstaff, AZ. May 1990

INVITED SEMINARS:

- 2008 Department of Biology, University of Mississippi, Oxford, MS
- 2007 Mississippi Junior Sciences and Humanities Symposium, University of Mississippi, Oxford, MS
- 2006 Marine Science Classes, Mountain Brook High School, Birmingham, AL
- 2005 Panel entitled "Doing Science: Focus on Undergraduate Involvement in Scientific Research", Sigma Xi/Honors College/Office of National Scholarship Advisement Panel, University of Mississippi, Oxford, MS
- 2005 University of Guam Marine Laboratory, Mangilao, Guam
- 2005 Caribbean Marine Research Center, Lee Stocking Island, Bahamas
- 2004 Mini-Symposium on Marine Science, Division of Science and Math, University of the Virgin Islands, St. Thomas, USVI
- 2004 University of Guam Marine Laboratory, Mangilao, Guam
- 2003 Edwin W. Pauley Summer Program on Assessing the Health of Pacific Corals, Hawaii Institute of Marine Biology, Kaneohe, HI
- 2003 University of Mississippi-NOAA/NURP workshop on Marine Resources of the Belize Barrier Reef, University of Belize, Belmopan, Belize

Deborah Gochfeld

- 2003 Joint Chemistry-Biology Merck-AAAS Undergraduate Research Program Seminar Series, Department of Biological Sciences, University of South Alabama, Mobile, AL
- 2003 Caribbean Marine Research Center, Lee Stocking Island, Bahamas
- 2002 Coastal Resources Management Division, Saipan
- 2001 Department of Biology, University of Mississippi, Oxford, MS
- 2001 Department of Marine and Wildlife Resources, Pago Pago, American Samoa
- 2000 Department of Pharmacognosy, Suez Canal University, Ismailia, Egypt
- 2000 Department of Biology, Florida Atlantic University, Boca Raton, FL
- 1999 Department of Pharmacognosy, University of Mississippi, Oxford, MS
- 1999 Department of Marine Sciences, Eckerd College, St. Petersburg, FL
- 1999 Department of Biology, Providence College, Providence, RI
- 1999 Department of Biology and Geology, University of South Carolina at Aiken, Aiken, SC
- 1999 High school mentoring program sponsored by the American Chemical Society. Oxford High School, Oxford, MS
- 1997 International Year of the Reef Natural History Lecture Series, Waikiki Aquarium, Honolulu, HI
- 1996 UCLA Marine Biology Course, Hawaii Institute of Marine Biology, Kaneohe, HI
- 1995 Department of Pharmacognosy, University of Mississippi, Oxford, MS
- 1992 Rollins College Marine Biology Course, Hawaii Institute of Marine Biology, Kaneohe, HI
- 1990 Summer Workshop on Behavioral Ecology of Marine Organisms, Hawaii Institute of Marine Biology, Kaneohe, HI

THESIS COMMITTEES:

- **Easson, C.** Ph.D., Environmental Toxicology Graduate Program, University of Mississippi (coadvisor). Thesis: Effect of nutrient enrichment on competition between *Microdictyon marinum* and *Aplysina cauliformis* on Caribbean coral reefs. 2008-present.
- **Freeman, C.** Ph.D., Department of Biology, University of Alabama at Birmingham (committee member). Thesis: Inputs of symbiont-derived nutrition to host sponges revealed by combining manipulative field experiments with stable isotope analyses. 2009-present.
- **Ehmen, B.** M.S., Department of Biological Sciences, University of South Alabama (committee member). Thesis: Seagrass Abundance, Distribution, and Population Structure in Grand Bay National Estuarine Research Reserve, Mississippi. 2007-present.
- **Krentz, L.** M.S. Environmental Toxicology Graduate Program, University of Mississippi (committee member). Thesis: Effects of BaP and ethinyl estradiol on the sex change event of the Bridled Goby. 2008-2010.
- **Pappas, K.E.** Honors Thesis, Sally McDonnell Barksdale Honors College, University of Mississippi (advisor). Thesis: Effects of bleaching and disease stress on antimicrobial chemical defenses in corals. 2008-2010.
- **Johnson, M.** Honors Thesis, Sally McDonnell Barksdale Honors College, University of Mississippi (committee member). Thesis: A chemical investigation of the antimalarial activity of *Axinella proliferans*. 2009-2010.
- **Marsh, K.E.** M.S., Department of Biology, University of Mississippi (committee member). Thesis: Pheromonal Signals: Implications for Sex Change in the Bridled Goby. 2001-2003.

PROFESSIONAL SERVICE:

Panelist, NSF East Asia and Pacific Summer Institutes. Jan. 2008. **Reviewer**

Research grant proposals: NSF/Biological Oceanography NOAA/Hawaii Coral Reef Initiative

NOAA/Hawaii Undersea Research Laboratory

Center for Field Studies/Earthwatch

Manuscripts:

Aquaculture

Aquatic Biology

Aquatic Toxicology

Behavioral Ecology

Bulletin of Environmental Contamination and Toxicology

Coral Reefs

Invertebrate Biology

Journal of Chemical Ecology

Journal of Experimental Marine Biology and Ecology

Journal of Natural Products

Journal of the Royal Society B

Journal of Shellfish Research

Marine Biology

Marine Ecology Progress Series

Book Chapters:

High school environmental science textbook (Holt, Rinehart and Winston)

The Biology of the Butterflyfishes (eds. M. Pratchett and M. Berumen)

Diseases of Corals (ed. A. Bruckner)

Graduate research fellowships/scholarships:

NSF East Asia and Pacific Summer Institutes

Graduate Women in Science/Sigma Delta Epsilon

American Association for Underwater Sciences

University of Mississippi Field Station Ralph Powe Research Award

Member, Diving Safety Control Board, Perry Institute of Marine Science/Caribbean Marine Research Center. 2006

Member, Vessa Notchev Fellowship Committee, Graduate Women in Science/Sigma Delta Epsilon. 2005-2006

Delegate and Judge, Sigma Xi Annual Meeting and Student Research Conference, Montreal, Canada, 11-14 Nov. 2004.

UNIVERSITY AND COMMUNITY SERVICE:

Vice Chair, Diversity Committee, School of Pharmacy, University of Mississippi. June 2006-present.

Member. Diving Safety Control Board, University of Mississippi. 2002-present.

Member. Resources Committee, Natural Resources Initiative of North Mississippi. 2002-present.

Organizer and Judge, Sigma Xi Student Research Symposium, University of Mississippi. 2005-2008.

Judge, North Mississippi Regional Science and Engineering Fair, Oxford, MS. 2001-2008.

President, University of Mississippi Chapter of Sigma Xi, 2005-2006

Chair, Associate Director Search Committee, National Institute of Undersea Science and Technology, 2005-2006.

Mentor, NSF Summer Research Institute for Undergraduates, University of Mississippi. Summers 2005, 2006.

Member. Faculty Search Committees, National Institute of Undersea Science and Technology, University of Mississippi. 2004-2006.

Member. Diversity Committee, School of Pharmacy, University of Mississippi, 2003-2006.

Judge, Mississippi Regional Junior Science and Humanities Symposium, Oxford, MS. 2005.

Judge, Sigma Xi Student Research Symposium, University of Mississippi. 2002-2004.

Mentor, National Institutes of Health Apprenticeship Program in the Biomedical Sciences, for minority high school students, University of Mississippi. Summers 1999, 2000.

PROFESSIONAL DEVELOPMENT:

- **Invited participant**, Sponge Ecology and Taxonomy Workshop, Smithsonian Tropical Research Institute, Bocas Research Station, Panama, 15-25 August 2005.
- **Participant**, International Workshop on the Taxonomy of Octocorals, Kerala University, Trivandrum, India, 21-26 March 2005.
- **Invited participant**, National Council of University Research Administrators, International Sponsored Programs Administration Workshop, University of Mississippi, 8 March 2005.
- **Invited participant**, Fogarty International Center, International Cooperative Biodiversity Groups Network Meeting, Bethesda MD, 14-15 October 2004.
- **Organizer**, Community Informational Meetings, "New Drugs from Marine Natural Resources of Jamaican Reefs", Workshops held at four locations within Jamaica, 8-11 June 2004. (18-40 participants per workshop)
- **Participant**, Edwin W. Pauley Summer Program "Assessing the Health of Pacific Corals", Hawaii Institute of Marine Biology, University of Hawaii, Kaneohe, HI. 9-28 June 2003.
- **Organizer**, Workshop: "Marine Resources of the Belize Barrier Reef", University of Belize, Belmopan, Belize, 11 March 2003. (~75 participants)
- **Participant**, National Academy of Sciences workshop on Marine Biotechnology, 5-6 November 2001.
- Participant, Sponge Taxonomy Workshop, University of Mississippi, 15-17 October 2001.

PROFESSIONAL MEMBERSHIPS:

American Association of Underwater Scientists American Association of University Women American Society of Pharmacognosy Association of Marine Laboratories of the Caribbean International Society for Reef Studies Pan American Marine Biotechnology Association Phi Beta Kappa

Sigma Xi (Associate Member 1989; Full Member 2003; President Elect, University of Mississippi Chapter 2004-2005; President, University of Mississippi Chapter 2005-2006; Past President, University of Mississippi Chapter 2006-2008)

Society of Environmental Toxicology and Chemistry