

KIHO KIM

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(i) Education History

- 1996 PhD Biology, University at Buffalo
- 1994 MS Biology, Florida International University
- 1989 BSc Biology & Environmental Studies, Brock University

(ii) Employment History

- 2008 Chair, Department of Environmental Science, American University
- 2007 Acting-Chair, Department of Biology, American University
- 2006- Associate Professor, Department of Biology, American University
- 2003- Director, Environmental Studies Program, American University
- 2000-2006 Assistant Professor, Department of Biology, American University
- 1999-2000 Research Associate, Center for the Environment, Cornell University
- 1996-1999 Postdoctoral Research Associate, Ecology & Evolutionary Biology, Cornell University

(iii) Professional Appointment

- 2009 Guest Editor, *Diseases of Aquatic Organisms* (special volume)
- 2009-2011 Council Member, *International Society for Reef Studies*
- 2007-2008 Member, Committee on *Effectiveness of International and National Measures to Prevent and Reduce Marine Debris and its Impacts*, National Research Council of the National Academies
- 2007-2010 Member, Ocean Studies Board of the National Academies, USA

(iv) Publications (*AU graduate student, ** AU undergraduate student)

- 32. National Research Council (2008) Tackling Marine Debris in the 21st Century. *The National Academies Press*
- 31. Baker DM*, SE MacAvoy & K Kim (2007). The Relationship between water quality, $\delta^{15}\text{N}$, and aspergillosis of Caribbean sea fan corals. *Marine Ecology-Progress Series* 343: 123-130
- 30. Ward JR, Kim K & Harvell CD (2007) Temperature affects coral disease resistance and pathogen growth. *Marine Ecology-Progress Series* 329:115-121
- 29. Kim K, AP Alker, K Shuster**, C Quirolo & CD Harvell (2006) Longitudinal study of aspergillosis of sea fan corals. *Diseases of Aquatic Organisms* 69: 95-99.

28. Gil-Agudelo DL, C Myers**, **K Kim** & GW Smith. 2006. Changes in the microbial communities associated with *Gorgonia ventalina* during Aspergillois infections. *Diseases of Aquatic Organisms* 69: 89-94.
27. Gil-Agudelo DL, L Ali-Hassan*, **K Kim** & Garriet W Smith (2006) Characterization of coral surface microbiota using metabolic profiling. *Proceedings of the International Coral Reef Symposium* 1: 149-152.
26. **Kim K** & GW Smith. 2005. *Gorgonia-Aspergillus* Pathosystem: Review of a fungal disease affecting Caribbean sea fan corals. In *Health and Disease of Aquatic Organisms: Bilateral Perspectives* edited by RC Cipriano, IS Shchelkunov & M Faisal, Living Oceans Found #2005-05, Michigan State University Press. Pp 285-292.
25. **Kim K**, AP Dobson, FMD Gulland & CD Harvell. 2005. Diseases and the Conservation of Marine Diversity. In *Marine Conservation Biology* edited by E Norse & L Crowder, Island Press. Pp 149-166.
24. Kim E, H Lasker, MA Coffroth & **K Kim** (2004) Morphological and genetic variation across reef habitats in a broadcast-spawning octocoral. *Hydrobiologia* 530/531: 423-432.
23. **Kim K** & CD Harvell (2004) The rise and fall of a six-year coral-fungal epizootic. *The American Naturalist* 164: S52-S63.
22. Alker A, **K Kim**, D Dube & CD Harvell (2004) Localized induction of a generalized response against multiple biotic agents in Caribbean sea fans. *Coral Reefs* 23: 397-405.
21. Harvell CD, 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 & J Ward. (2004) The rising tide of ocean diseases: unsolved problems and research priorities. *Frontiers in Ecology and the Environment* 2: 375-382.
20. **Kim K** & CD Harvell. 2002. Aspergillois of sea fan corals: dynamics in the Florida Keys. In *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys: An Ecosystem Handbook*, edited by Porter JW & K Porter, CRC Press.
19. Dube D, **K Kim**, AP Alker & CD Harvell CD. 2002. Size structure and geographic variation in chemical resistance of sea fan corals *Gorgonia ventalina* to a fungal pathogen. *Marine Ecology-Progress Series* 231: 139-150.
18. Harvell CD, **K Kim**, C Quirolo, J Weir & Smith GW. 2001. El Niño associated bleaching in *Briareum asbestinum* (Gorgonacea) and subsequent mortality from disease in the Florida Keys. *Hydrobiologia* 460: 97-104.
17. Alker AP, GW Smith & **K Kim**. 2001. Characterization of *Aspergillus sydowii* (Thom et Church), a fungal pathogen of Caribbean sea fan corals. *Hydrobiologia*, 460: 105-111.
16. **Kim K**, PD Kim, AP Alker & CD Harvell. 2000. Antifungal properties of gorgonian corals. *Marine Biology*, 137: 393-401.

15. **Kim K**, CD Harvell, PD Kim, GW Smith, SM Merkel. 2000. Role of secondary chemistry in fungal disease resistance of sea fans (*Gorgonia* spp.). *Marine Biology* 136: 259-267.
14. Harvell CD, **K Kim**, JM Burkholder, RR Colwell, PR Epstein, DJ Grime, EE Hofman, EK Lipp, ADME Osterhaus, RM Overstreet, JW Porter, G Smith. GR Vasta. 1999. Emerging marine diseases—climate links and anthropogenic factors. *Science*, 285: 1505-1510.
13. **Kim K** & HR Lasker. 1998. Resource capture and constraints on modular growth. *Journal of Functional Ecology* 12: 646-654.
12. Smith GW, CD Harvell, **K Kim**. 1998. Observations on the pathogenesis of sea fans infected with *Aspergillus* sp. *Revista de Biologia Tropical* 5: 205-208.
11. Lasker HR, **K Kim**, MA Coffroth. 1998. Production, settlement, and survival of plexaurid gorgonian recruits. *Marine Ecology Progress Series* 162:111-123.
10. Nagelkerken I, K Buchan, GW Smith, K Bonair, P Bush, J Garzon-Ferreira, L Botero, P Gayle, CD Harvell, C Heberer, **K Kim**, C Petrovic, L Pors, P Yoshioka. Widespread fungal pathogen in Caribbean sea fans: II. Patterns of infection and tissue mortality. 1997. *Marine Ecology Progress Series* 160: 255-263.
9. Clifton KE, **K Kim** & J Wulff. 1997. Field guide to the reefs of Caribbean Panama with emphasis on the fauna and flora of western San Blas. *Proceedings of the 8th International Coral Reef Symposium* 1: 167-184.
8. **Kim K** & HR Lasker. 1997. Flow-mediated competition among suspension feeding gorgonians. *Journal of Experimental Marine Biology and Ecology* 215: 49-64.
7. Swain TD, **K Kim** & HR Lasker. 1997. Use of fluorescence microscopy in an assay of sperm density for the gorgonian coral, *Plexaura kuna*. *Proceedings of the 8th International Coral Reef Symposium* 2: 1341-1344.
6. Lasker HR & **K Kim**. 1996. Larval development and settlement behavior of the gorgonian coral *Plexaura kuna*. *Journal of Experimental Marine Biology and Ecology* 207: 161-175.
5. Lasker HR, **K Kim** & MA Coffroth. 1996. Reproductive and genetic variation among Caribbean gorgonians: the differentiation of *Plexaura kuna*, sp. nov. *Bulletin of Marine Science* 58: 277-288.
4. Lasker HR, DA Brazeau, J Calderon, MA Coffroth, R Coma & **K Kim**. 1996. In situ rates of fertilization among broadcast spawning gorgonian corals. *Biological Bulletin* 190: 45-55.
3. **Kim K**. 1994. Antimicrobial activity in gorgonian corals (Coelenterata, Octocorallia). *Coral Reefs* 13: 75-80.
2. Goldberg WM, TL Hopkins, SM Holl, J Schaefer, KJ Kramer, TD Morgan & **K Kim**. 1994. Chemical composition of the sclerotized black coral skeleton (Coelenterata: Antipatharia): A comparison of two species. *Comparative Biochemistry and Physiology* 107B: 633-643.

1. **Kim K, WM Goldberg & GT Taylor.** 1992. Architectural and mechanical properties of the black coral skeleton (Coelenterata: Antipatharia): A comparison of two species. *Biological Bulletin* 182: 195-209.

(v) Grants Awarded

- 2008 NOAA-Fisheries Habitat Conservation Program Office. *Testing for links between nutrient pollution and coral health and disease* (\$50,000)
- 2006 NOAA–National Undersea Research Center. *The link between coral hosts, surface microbiota and disease* (\$39,981)
- 2006 American University, Senate Research Award. *Environmental filmmaking: science in film / film in science, where scientists meet story* with Larry Engel (SOC) and Chris Palmer (SOC) (\$6,000)
- 2004 American University, Senate Research Award. *Microbial Diversity in Human-Influenced Ecosystems: A multiyear comparison.* (\$8,000)
- 2003 US-EPA, *Origins and impacts of the Sea Fan Aspergillosis Epizootic Explored with Molecular and Field Techniques* (\$11,693)
- 2002 NOAA–National Undersea Research Center. *Impact of Aspergillosis of sea fan corals in the Florida Keys, Rapid Response Support* (diving and other on-site logistic support)
- 2001 American University, Senate Research Award. *Role of Pollution on Susceptibility of Corals to Disease: A Stable Isotope Analysis* (\$9,990)
- 2000 National Oceanic and Atmospheric Administration—National Undersea Research Center, *Aspergillosis of sea fans in the Florida Keys: disease resistance and spread* (Co-PI with CD Harvell; ~\$20,000)
- 1998 NSF-BIO OCE, *Disease resistance in sea fan corals and the host range of the fungal pathogen* (CO-PI with D Harvell, \$450,080)
- 1998 New England BioLabs Foundation, *Host-breadth of Aspergillosis* (Co-PI with CD Harvell; \$30,000)
- 1998 National Oceanic and Atmospheric Administration—National Undersea Research Center, *Keys-wide monitoring of a fungal epizootic of sea fans* (Co-PI with CD Harvell; \$22,000)

(vi) Research Supervision - Graduate Students (Since 2000)

Supervisor: Genelle Harrison (MS), Walker Timme (MS), Emily Broderick (MS 2008), Kirby Webster (MS 2007), Lanna Ali-Hassan (MA 2006), Erin Reigh (MS 2006), David Baker, (MS, 2003), Katherine Bruce (MS 2001)

Committee Member: Ramy Sorour (PhD, U Maryland), Katrina Pagenkopp (MS, American University), Jessica Ward (PhD, Cornell University), Katie Schneider (MS, American University), Malia Somerville (MS, American University),

Candice Dorsey, (MS, American University), Bonnie Coy (MS, American University)

Research Supervision - Undergraduate Students (Since 2000)

My Nguyen, Jaime Fultz, Walker Timme (Honors Project), Carey Myers, Tahir Jamil, Erin Reigh (Honors Project), Daphne Wono, Mike Dema, Kara Shuster

(vii) Departmental & University Service/Activities

- 2008 Joint Committee on Curriculum and Academic Programs, Co-Chair (University), Executive Committee of the Faculty Senate (University), Faculty Athletic Advisory Council (University), AU Abroad Program, ENVS Undergraduate Committee, Biology Search Committee, Panelist–Sustaining the Ivory Tower: a Noontime Conversation with CTE, Panelist–Frontiers of Environmental Understanding with Focus the Nation, Moderator–Mathias Student Research Conference, Mock Interviewer–Greenberg Seminar, International Coastal Cleanup-Fletcher’s Boathouse, Casey Tree Foundation Planting, Internship Coordinator, Webmaster–Environmental Science, ENVS PhD Committee, SIS Global Environmental Politics Search.
- 2007 Senate Joint Committee on Curriculum and Academic Programs (Co-Chair), Faculty Athletic Advisory Council, Faculty Team Advisor for Women’s Field Hockey, EPC Research Committee, Curriculum Integration Committee for AU Abroad Program, Rank & Tenure, ENVS Undergraduate Committee
- 2006 Senate Joint Committee on Curriculum and Academic Programs (Co-Chair), Faculty Athletic Advisory Council, Faculty Team Advisor for Women’s Field Hockey, EPC Research Committee, Curriculum Integration Committee for AU Abroad Program, Rank & Tenure, ENVS Undergraduate Committee, Environmental Policy Faculty Search (SIS)
- 2005 CAS Budget Advisory Committee, Academic Integrity Panel, Center for Environmental Films Ad Hoc Committee Member, Pre-Med Advisor Athletic Advisory Committee, CAS EPC Research Committee, Faculty Team Advisor for Women’s Field Hockey
- 2004 CAS Budget Advisory Committee, CAS Technology Committee, Pre-Med Advisor, Academic Integrity Panel, Faculty Team Advisor for Men’s Golf Team Center for Environmental Films Ad Hoc Committee Member, AU DC-Sharjah Science Exchange Program - Ad Hoc Committee (Chair), Biology & Environmental Studies Webmaster

- 2003 CAS Budget Advisory Committee, CAS Technology Committee, Pre-Med Advisor, Academic Integrity Panel Member, CAS Dissertation Fellowship Committee, Biology & Environmental Studies Webmaster
- 2002 Biology Undergraduate Studies (Chair), CAS Technology Committee, Environmental Studies (Director), CAS Budget Advisory Committee,
- 2001 Rank & Tenure, Biology Undergraduate Studies (Chair), Environmental Studies (Director), Faculty Search Committee (Microbiology), Biology & Environmental Studies Webmaster, Academic Integrity Panel, Rank & Tenure, Biology Undergraduate Studies (Chair)
- 2000 Faculty Search—Molecular Genetics (Committee Member), Marine Sciences Track Development (Committee Member), Biology Webmaster