Pamela Hallock Muller University of South Florida-College of Marine Science

Curriculum Vitae

Initial Date of USF Employment/August 1983

General Data

Name: Pamela Hallock Muller Address: College of Marine Science

University of South Florida Initial Rank: Associate Professor 140 Seventh Ave. S. Present Rank: Professor (8/88)

St. Petersburg, FL 33701 Tenured (6/86)

Phone: 727–553–9567 FAX: 727–553–1189

e-mail: pmuller@ usf.edu website: www.marine.usf.edu/reefslab

Education

InstitutionField of StudyDegreeDateUniversity of Montana, Missoula University of Hawaii, HonoluluZoology OceanographyB.A. June 1969University of Hawaii, HonoluluOceanographyM.S.

Honors, Awards, Biographies

1965–1969 1966 1968 1968 1971–1973 1976 1979, 1982 1981 1987	University of Montana Alumni Association Scholarships Elected to Alpha Lambda Delta Scholastic Honorary, University of Montana Elected to Phi Sigma Biological Honorary, University of Montana Elected to Phi Kappa Phi Scholastic Honorary, University of Montana National Science Foundation Traineeship, University of Hawaii ARCS Foundation Scholarship for a graduate student in the sciences, University of Hawaii Nominee for Outstanding Teacher at the University of Texas of the Permian Basin. Listed in Outstanding Young Women of America NASA/ASEE Summer Faculty Fellowship
1987	NASA/ASEE Summer Faculty Fellowship
1991 1994	Listed in American Men and Women of Science & Who's Who in American Women W. Storrs Cole Memorial Research Award, Geological Society of America

Editorial Boards:

Associate Editor–*Journal of Foraminiferal Research* (1985–2003) Associate Editor for Larger Foraminifera–

Master's Thesis Advisory Committees

University of Texas of the Permian Basin Jackie L. Carter–Counseling 1982 Linda B. Forward-Life Science 1984 (Co-chair while at UTPB)

University of South Florida-completed

- 1. David Martin-Marine Science-1984
- 2. Jean Hebert-Marine Science-1985
- 3. Rosanne Joyce–Marine Science–19854. Joan Hutton–Marine Science–1986
- 5. David Mearns-Marine Science

Mentor/advisor for CMS Minority Recruitment Programs:

Sloan PhD program:

Michael Martínez-Colón, PhD 2016 Natasha Mendez-Ferrer, PhD 2016

Adrienne George, MSc, PhD 2017

NSF-Bridge to Doctorate Program for minority students:

Camille Daniels, MSc 2005, PhD 2011

Eddy Flores–2005–2006 withdrew

Ryann Williams, MSc 2009

Adrienne George, MSc, PhD 2017

Natasha Mendez-Ferrer, PhD 2016

Natalia Lopez-Figueroa, PhD-in progress

Other Minority Students Supervised

Nicole Turkson, MSc 2000

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<u>Undergraduate Students hosted/supervised:</u>

Michelle Williams, Wichita State University, Wichita, KS–Summer 2000 Jenny Nichols, Environmental Science/Policy, USF, St. Petersburg–Spring 2003 Heidi Gillum, Friends University, Wichita, KS–Summer/Fall 2003 Zaki Moustafa, Duke University–2008

Manuscript published in Proc. 2008 International Coral Reef Symposium Elise Keister, Center for Industrial & Interdisciplinary Mathematics, USF–2009 published project in the Undergraduate Journal of Mathematical Modeling: One + Two, http://shell.cas.usf.edu/math/mug/ujac/f09/

Denise Bortnak, Department of Integrative Biology, USF-2009-10

Brittany Lyp, Environmental Science and Policy, STREAMS Fellow-2008-12

Brooke Freeberg, Environmental Science and Policy, STREAMS Fellow-2009-12

Ashley Earls, Claudia Burriss-Applied Calculus II Projects-Fall 2010

Sofialejandra Bejarano-Applied Calculus II Project-Spring 2011

Elizabeth Stoever-Applied Calculus II Project-Fall 2011

Kasi Techron–Environmental Science and Policy, USF St Petersburg–2011–12

Stephanie Lawler-Environmental Science and Policy, USF St Petersburg-2011

Brittani Woolverton-Environmental Science and Policy, USF St Petersburg-2012

Elizabeth Johnsey-Environmental Science and Policy, USF St Petersburg-2012-14

Benjamin Prueitt–Environmental Science and Policy, USF St Petersburg–Senior Honors Thesis Advisor–2012–13

Sophia Grammerler-Integrative Biology-2014

Marshall Lester–Environmental Science and Policy (Intern Spring 2015)

Garrett Miller-Biology USFSP, Senior Honors Thesis Advisor-December 2015

Alexis Valencia-Biology USFSP-Fall Semester 2016

Middle/High School Students Hosted/Supervised:

Christy Fascenello, Center for Advanced Technology, Lakewood High School–1998–99 Courtney Borowsky, Center for Advanced Technology, Lakewood High School–1998–99 1999 International Science Fair–NASA Internship Award

Zaki Moustafa, Dreyfos High School of the Arts, West Palm Beach, FL–2004–08
Science mentor through high school: Zaki was invited to the International Science and Engineering Fair (ISEF) each year and in 2008 was awarded the "The Pulse of the Planet Award" by National Ocean and Atmospheric Association and the INTEL ISEF–Animal Science–4th Place Grand Award

Sage Hazlett, Home Schooled, Clearwater, 1st place Middle-School Science Fair-2014

University, College, Departmental, or SUS Councils or Committees

The University of Texas of the Permian Basin
Faculty Senate Curriculum Committee (1981–1982, chair: 1982)
Library–Media Committee (1978–1982)
Financial Aid and Scholarship Committee (1979–81, 1982–83)
Alumni Committee (1981–82)
Advisory Committee for the Selection of a Chief Administrative Officer (President) of the

SUS/BOR/UFF Committees

UFF/BOR Joint Task for on SUS Faculty Salaries (Member 1999–2000)

Civic and Public Service Activities

Member and scientific advisor, Odessa Meteor Crater Task Force, Tourism Committee, Odessa Chamber of Commerce, Odessa, Texas (1979–1983)

Career Day Speaker on Oceanography for Midland and Lee Freshman High Schools, Texas (1980–83) Marine Science Consultant to South Baywood Neighborhood (Southeast St. Petersburg, FL) Girl Scouts (1983–85)

Book Scholarship Committee Chair, USF-St. Petersburg Women's Organization (1985-86)

Lecture on coral reefs/marine science/paleontology (or locate lecturers) for Pinellas County Schools Community Resources Bank (1984–1998)

Member Scientific Advisory Panel, American Littoral Society–Coral Reef Conservation Center, Key Biscavne, Florida (1988–1992)

University of South Florida–St. Petersburg Speaker's Bureau (1988–1998; discontinued at that time) Judge. 35th State Science and Engineering Fair (1990)

Judge, Pinellas County Science Fair (1989, 1991, 1994, 1995, 1999, 2003)

Participant, Save Our Shores Coastal Cleanups: annually 1993-2020

Mentor for two Lakewood High School (Center for Advanced Technologies) science students (1996–97)

American Association of University Women Legal Advocacy Fund Speaker (1999–2000)

Organized teams for Oasis Bowl-a-thon, USF, St. Petersburg (2000, 2002)

Member: Special Coral Scientific and Statistical Committee, Gulf of Mexico Fishery Management Council (1999–2003)

Mentor for Zaki Mousta4(r)kJETB I51 Tm - 425.11 Tm[(Me)3(nto)4(r)-3(f)-9(or [(17124(r)-3(f)-9(or)5(IBDC8r6BT/1)4(S)4(p

Research and Creative Activities

<u>Publications</u> (*my graduate students;**student on whose committee I served)

Articles in Refereed Journals

- 1. Muller, P. Hallock. 1974. Sediment production and population biology of the benthic foraminifer *Amphistegina madagascariensis*. Limnology and Oceanography 19:802–809.
- 2. Muller, P. Hallock. 1978. Carbon-14 fixation and loss in a foraminiferal-algal symbiont system. Journal of Foraminiferal Research 8:34–41.
- 3. Hallock, P. 1979. Trends in test shape in large, symbiont-bearing foraminifera. Journal of Foraminiferal Research 9:61–69.
- 4. Hallock, P. and H. J. Hansen. 1979. Depth adaptation in *Amphistegina*: change in lamellar thickness.

Articles in Refereed Journals (cont.)

- 22. Hine, A. C., P. Hallock, M. Harris**, H. T. Mullins, D. F. Belknap and W. C. Jaap. 1988. *Halimeda* bioherms along an open seaway: Miskito Channel, Nicaraguan Rise, S.W. Caribbean Sea. Coral Reefs 6:173–178.
- 23. Hallock, P., I. Premoli-Silva and A. Boersma. 1991. Similarities between planktonic and larger foraminiferal evolutionary trends through Paleogene paleoceanographic changes. Palaeogeography, Palaeoclimatology, Palaeoecology 83:49–64.
- 24. Triffleman*, N. J., P. Hallock, A. C. Hine and M. W. Peebles*. 1991. Foraminifera of Serranilla Bank: Distribution of Foraminiferal Tests in Sediments of Serranilla Bank, Nicaraguan Rise, Southwestern Caribbean. Journal of Foraminiferal Research 21:39–47.
- 25. Hine, A. C., S. D. Locker, L. P. Tedesco, H. T. Mullins, P. Hallock, D. F. Belknap, J.

Articles in Refereed Journals (cont.)

- 40. Lee, J.J., J. Morales, S. Bacus, A. Diamont, P. Hallock, J. Pawlowski, and J. Thorpe. 1997. Progress in characterizing the endosymbiotic dinoflagellates of soritid foraminifera and related studies on the life cycle of *Marginopora vertebralis*. Journal of Foraminiferal Research, 27(4): 254–263.
- 41. Harney*, J., Hallock, P., and Talge*, H.K. 1998. Observations on a trimorphic life cycle in *Amphistegina gibbosa* populations from the Florida Keys. Journal of Foraminiferal Research, 28(2):141–147.
- 42. Toler*, S.K. and P. Hallock. 1998. Shell malformation in stressed *Amphistegina populations*: relation to biomineralization and paleoenvironmental potential. Marine Micropaleontology 34: 107–115.
- 43. Hallock, P., Talge*, H.K., Williams*, D.E., and Harney*, J.N. 1998. Borings in *Amphistegina* (Foraminiferida): Evidence for predation by *Floresina amphiphaga* (Foraminiferida). Historical Biology 13:73–76.
- 44. Fujita, K. and P. Hallock. 1999. A comparison of phytal substrate preferences of *Archaias angulatus* and *Sorites orbiculus* in mixed macroalgal-seagrass beds in Florida Bay. Journal of Foraminiferal Research 29:143–151.
- 45. Harney*, J.N., P. Hallock, C.H. Fletcher III, B.M. Richmond. 1999. Standing crop and sediment production of reef-dwelling foraminifera on Oahu, Hawaii. Pacific Science 53:61–73.
- 46. James, N.P., L.B. Collins, Y. Bone and P. Hallock. 1999. Rottnest Shelf to Ningaloo Reef: Cool-Water to Warm-Water Carbonate Transition on the Continental Shelf of Western Australia. Journal of Sedimentary Research 69:1297–1321.
- 47. Hallock, P. 2000. Symbiont-bearing foraminifera: harbingers of global change. Micropaleontology 46(Suppl. 1): 95–104.
- 48. Lidz65.86 56nBT/MCID 9>>TJET509.47 Tm[<0.eF 0 id6.82 Tm[(-)] TJETBT1 pc[(101f -0.MCID 9>>TJET509.47 Tm[<4

Articles in Refereed Journals (cont.)

- 115. *Martínez-Colón**, M., Hallock, P., Green-Ruíz, C.R., Smoak, J.M. 2018. Benthic foraminifera as bioindicators of potentially toxic element (PTE) pollution: Torrecilla Lagoon (San Juan Bay Estuary), Puerto Rico. Ecological Indicators 89:516–527.
- 116. *Mendez-Ferrer**, N., Hallock, P., Jones, D. 2018. Photochemical efficiencies of diatom symbionts in hospite in *Amphistegina gibbosa* (Foraminifera) across seasons in the Florida Keys, USA. Journal of Foraminiferal Research, 48(1): 4–16.
- 117. Ross, B. J., Hallock, P. 2018. Challenges in using CellTracker Green on foraminifers that hostTJET EMC /P <</MCID

Articles in Refereed Journals (cont.)
132. Caragnano A., Basso D., Spezzaferri S., Hallock P., and Conférence Universitaire de Suisse Occidentale Scientific Party (2021)

Book Chapters/Encyclopedia Sections (cont.)

12. Hallock, P., Sheps*, K., Chaproniere, G.C.H., and Howell, M. 2006. Larger benthic foraminifers of the Marion Plateau, NE Australia (ODP Leg 194): Comparison of faunas from bryozoan (Site 1193, 1194)

Articles in Symposia and Conference Proceedings (cont.)

- 19. Hallock, P. 2001. Larger foraminifers as contributors to carbonate beach sands. Carbonate Beaches 2000, Key Largo, FL, 12/5–8/2000, Proceedings, COPRI/American Society of Civil Engineers, p. 97–98.
- 20. Lidz, B.H., and P. Hallock. 2001. Testing a multi-tiered stress-gradient model for risk assessment using sediment constituents from coral reef environments. Carbonate Beaches 2000, Key Largo, FL,

Other Published Articles [refereed marked (R)]

- 1. Hallock, P. 1985. Future farmers of the sea. Natural History 94:60–67. (R)
- 2. Hallock, P. 1990. Nutrient pollution in coastal systems—Can it be stopped? Underwater Naturalist 19:5–18
- 3. Hallock, P. 1992. Aquarius habitat site at Conch Reef: on foraminifera with algal symbionts: http://archive.rubicon-foundation.org, p. 93–98.
- 4. Hallock, P. 1995. Promoting foraminiferal research. Journal of Foraminiferal Research, 25: 186–187.
- 5. Hallock, P. 1997 Cushman Award Winner-Lukas Hottinger. Journal of Foraminiferal Research, 28:1-2.
- 6. Hallock Muller, P. 1999. Salary Inequities at USF. Gaea, Vol. XXII (1) 1,4.
- 7. Hallock, P. 2000. 1999 Cushman Award Winner: John J. Lee. Journal of Foraminiferal Research, 3:1–2.
- 8. Hallock, P., M. Dotherow McField, and S. Samson. 1999. The prototype radiometer that survived Hurricane Georges. The Slate, A News Publication of the American Academy of Underwater Sciences. October 1999, p. 1.
- 9. Hallock, P. 2008. Memorial to Johanna Martha Resig (1932–2007). Journal of Foraminiferal Research 38(1): 90–91.

Books, Guidebooks or Special Volumes Edited

1. Jons, R. D., P. Hallock and W. R. Gibson (eds.). 1981. Marathon–Marfa Region of west Texas symposium and guidebook. Permian Basin Section–Society of Economic Paleontologists and Mineralogists Publ. 81–20, 227 pp.

Grants and Contracts

- Distribution and sediment production by shallow–water foraminifera at selected sites on Oahu, Hawaii. Principal Investigator. The Environmental Center, University of Hawaii. July 1974–June 1975; \$2,500.
- The distribution of foraminifera in the vicinity of the present and proposed outfalls of the Kahe Point Power Plant. Principal Investigator. Hawaiian Electric Company, Inc. May 1975–August 1976; \$4,000.
- The effects of the Kahe offshore outfall on benthic foraminifera. Principal Investigator. Hawaiian Electric Company, Inc. January–October 1977; \$1,500.

Support of the Research Activities of a Marine Engineering Institute at the University of South Florida. Co-

Grants and Contracts (cont.)

Grants and Contracts (cont.)

Grants and Contracts (cont.)

West Florida Shelf: A Natural Laboratory for the Study of Ocean Acidification. Shiptime proposal to Florida Institute of Oceanography.

- Meeting Abstracts (cont.)
- <u>Lee, J. J.</u> and P. Hallock. 1986. Algal symbiosis as the driving force in the evolution of larger foraminifera. The Third International Colloquium on Endocytobiology, New York.
- Hallock, P., G. A. Vargo, A. C. Hine, N. J. Triffleman*, K. J. Boomer*, W. C. Jaap and D. F. Belknap. 1987. Platforms of the Nicaraguan Rise: Examples of suppression of carbonate accumulation by excess nutrients? Geological Society of America Annual Meeting, Phoenix, Arizona.
- <u>Hine, A. C.</u> and P. Hallock. 1987. Carbonate platforms of the Nicaraguan Rise: Overview. Geological Society of America Annual Meeting, Phoenix, Arizona. GAAPBC 19:703.
- <u>Triffleman*, N. J.</u>, P. Hallock and A. C. Hine. 1987. Morphology, sediments, and depositional environments of a partially drowned carbonate platform: Serranilla Bank–Southwest Caribbean Sea. Geological Society of America Annual Meeting, Phoenix, Arizona. GAAPBC 19:871.
- Hallock, P. 1988. Interoceanic differences in algal symbiont-bearing foraminifera: A result of nutrient supplies? 6th International Coral Reef Symposium, Townsville, Australia (abstracts), p. 40.
- Hallock, P. and J. A. Elrod. 1988. Oceanic chlorophyll around carbonate platforms in the western Caribbean: Observations from CZCS data. 6th International Coral Reef Symposium, Townsville, Australia (abstracts), p. 40.
- Hallock, P., A. C. Hine and J. L. Gonzales. 1988. Porifera: A substratum for the development of rhodoliths. Geological Society of America Annual Meeting, Denver, Colorado. GAAPBC 20:A339.
- Hallock, P., G. A. Vargo, A. C. Hine, N. J. Triffleman*, W.C. Jaap and J. A. Elrod. 1988. Suppression of coral reef development by excess nutrients: Examples on the Nicaraguan Rise? Association of Island Marine Laboratories of the Caribbean, 21st Annual Meeting, Sarasota, Florida.
- <u>Hine, A. C.</u>, P. Hallock, H. T. Mullins, W. C. Jaap, M. W. Harris** and D. F. Belknap. 1988. Geologic setting of large *Halimeda* bioherms in the Caribbean Sea. 6th International Coral Reef Symposium, Townsville, Australia (abstracts), p. 44.
- <u>Hine, A. C.</u>, M.W. Harris**, P.Hallock, H.T. Mullins, D.F. Belknap and A. C. Neumann. 1988. Structure, stratigraphy, and sedimentation of a current-dominated open seaway within a carbonate platform complex: Miskito Channel, Nicaraguan Rise, SW Caribbean Sea. Geological Society of America Annual Meeting, Denver, Colorado. GAAPBC 20:A70.
- <u>Triffleman*, N. J.</u>, P. Hallock, A.C. Hine, G.A. Vargo and J. Garrett*. 1988. Serranilla Bank (southwestern Caribbean): An enigma of chloralgal sedimentation in an oceanic setting. Geological Society of America Annual Meeting, Denver, Colorado. GAAPBC 20:A209.
- Hallock, P. 1989. An environmental mechanism that may contribute to different average survivorship curves for living and extinct taxa. Geological Society of America Annual Meeting, St. Louis, Missouri. GAAPBC 21:A207.
- Hallock, P. and I.Premoli-Silva. 1989. Correlation between carbonate-platform benthos and planktonic foraminiferal evolution through Paleogene paleoceanographic changes. Abstracts of Third International Conference on Palaeo-Oceanography, Cambridge, England. Blackwell Scientific Publ., London, p. 8.
- Harris**, M. W., A. C. Hine, H. T. Mullins and P. Hallock. 1989. Echo character (3.5 kHz) along a current-dominated open seaway, Miskito Channel, Nicaraguan Rise, Caribbean Sea. Geological Society of America Annual Meeting, St. Louis, Missouri. GAAPBC 21:A329.
- Peebles*, M. W., P. Hallock and A. C. Hine. 1989. Sedimentology and taphonomy of Thunder and

Meeting Abstracts (cont.)
Hallock, P., A. C. Hine, M. W. Harris**, N. J. Triffleman* and M. W. Peebles*. 1990. Bimodality in Coral

- Meeting Abstracts (cont.)
- <u>Talge*, H. K.</u> and P. Hallock. 1994. Investigation of mottling in benthic foraminifera, *Amphistegina gibbosa*. Florida Society for Microscopy 12th Annual Meeting, Daytona Beach, Florida, May 5–6, 1994.
- <u>Yanko, V.</u>, V. Bresler, and P. Hallock. 1994. Defense transport systems against xenobiotics in some benthic foraminifera. Ann. Meeting, Zoological Society of Israel, Tel Aviv University, Tel Aviv, p. 22–23.
- Young**, L. R., K. L. Carder and P. Hallock. 1994. Hyperspectral remotely sensed colored dissolved organic matter as a photoprotective agent against bleaching in corals and foraminifera. EOS Transactions 75(3), 1994 Ocean Sciences (AGU/ASLO) Meeting, San Diego, California, p. 103.
- Cockey*, E., P. Hallock and B. H. Lidz. 1995. Thirty-year changes in benthic foraminiferal assemblages off Key Largo, Florida. Congress Program and Abstracts, Vol. 1, The 1st SEPM Congress on Sedimentary Geology, St. Petersburg Beach, Florida, p. 40.
- Hallock, P., H. Talge* and E. Cockey*. 1995. Larger foraminifera as environmental indicators for coral reefs. Congress Program and Abstracts, Vol. 1, The 1st SEPM Congress on Sedimentary Geology, St. Petersburg Beach, Florida, p. 63.
- Hallock, P., <u>D. E. Williams*</u> and H. K. Talge*. 1995. Population response to prolonged sublethal environmental stress by *Amphistegina* (Foraminiferida) in the Florida Keys. Congress Program and Abstracts, Vol. 1, The 1st SEPM Congress on Sedimentary Geology, St. Petersburg Beach, Florida, p. 63–64.
- <u>Harney*, J., P. Hallock and H. K. Talge*. 1995. Life cycle modification in stressed populations of the foraminifer *Amphistegina gibbosa.* 1995. Congress Program and Abstracts, Vol. 1, The 1st SEPM Congress on Sedimentary Geology, St. Petersburg Beach, Florida, p. 64.</u>
- <u>Talge*</u>, H.K. and P. Hallock. 1995. Cytological examination of mottling in foraminifera, *Amphistegina Gibbosa*. Congress Program and Abstracts, Vol. 1, The 1st SEPM Congress on Sedimentary Geology, St. Petersburg Beach, Florida, p. 120.
- <u>Toler*, S, K.</u>, P. Hallock, H. K. Talge* and L. L. Robbins. 1995. Calcification damage associated with symbiont loss in *Amphistegina* (Foraminiferida) in the Florida Keys. Congress Program and Abstracts, Vol. 1, The 1st SEPM Congress on Sedimentary Geology, St. Petersburg Beach, Florida, p. 122.
- Hallock, P., H. K. Talge*, D. E. Williams*, J. N. Harney* and E. M. Cockey*. 1995. Five summers of bleaching in Reef-dwelling foraminifera in the Florida Keys: Consequences and implications. Geological Society of America 1995 Annual Meeting, New Orleans, Louisiana. GAAPBC:27: A–245
- Hallock, P.1996. The energetics of algal symbiosis: Implications for evolution. North American Paleontological Convention, Washington, D.C. June 1996.
- <u>Talge*, H.K.</u>, P. Hallock, D.E. Williams*, J.N. Harney*, and S.K. Toler*. 1996. Symbiont loss in reef foraminifera: Consequences for affected populations. 8th International Coral Reef Symposium, Panama, June 1996.
- Hallock, P., Y. Bone, L.B. Collins, and N.P. James. 1996. Larger foraminifera of the West Australian Shelf: Modern maladies and Pleistocene paleodepths. Geological Society of America 1996 Annual Meeting, Denver, Colorado, GAAPBC 28:129.
- Harney*, J.N., P. Hallock, C.H. Fletcher, J.M. Resig, and B. Richmond. 1996. The contribution of larger foraminifera to coastal zone sediments of Oahu, Hawaii. Geological Society of America 1996 Annual Meeting, Denver, Colorado, GAAPBC 28:74.
- Williams*, D.E., P. Hallock, H.K. Talge*, and J.N. Harney*. 1996. Responses of *Amphistegina gibbosa* populations in the Florida Keys to a multi-year stress event (1991–96) Geological Society of America 1996 Annual Meeting, Denver, Colorado, GAAPBC 28:49.
- Hallock, P., H.K. Talge*, and D.E. Williams*. 1997. Reef-dwelling larger foraminifera: Harbingers of global change. 10th International Congress of Protozoology, Sydney, Australia, July 21–25, 1997; Programme and Abstracts, p. 95.
- <u>Talge*, H.K.</u> and P. Hallock. 1997. Cytological techniques for stressed *Amphistegina* (Foraminifera): Challenges of working with an adapting poplation. 10th International Congress of Protozoology, Sydney, Australia, July 21–25, 1997; Programme and Abstracts, p. 195.

- Hallock, P., Crevison*, H.L. 2002. Foraminifera as Bioindicators in Coral Reef Assessment and Monitoring: The Foram Index. EMMM'2002, The Third International Congress "Environmental Micropaleontology, Microbiology and Meiobenthology", Vienna, Austria, 09/04/02, Program and Abstracts, pp. 96–97.
- Hallock, P. 2002. Foraminifers as Bioindicators in Coral Reef Ecosystems. Geological Society of America Annual Meeting, Denver, CO, 10/29/02. GSA Abstracts with Programs, 34(6):384–385.
- Hallock, P., F.S. Anselmetti, A.R. Isern, P. Blum, and Leg 194 Shipboard Party. 2002. Environmental Sensitivity of Biotic Assemblages in Subtropical Carbonate Buildups: Miocene Examples from the Marion Plateau, Australia (ODP Leg 194). Geological Society of America Annual Meeting, Denver, CO, 10/28/02. GSA Abstracts with Programs, 34(6):167.
- <u>Hoare*, A.M.</u>, Hallock, P., B. H. Lidz, C. Reich, E.A. Shinn, 2002. Do Benthic Foraminiferal Assemblages Reflect Heavy Metal Contamination in Sediments of Biscayne Bay, Florida, USA? Geological Society of America Annual Meeting, Denver, CO, 1029/02. GSA Abstracts with Programs, 34(6):384.
- <u>Barnes*, K.</u> and P. Hallock. 2003. Spatial and temporal distribution of diatom endosymbionts in *Amphistegina gibbosa* (Foraminifera): Preliminary findings. 4th International Symbiosis Society Congress, Halifax, NS, Canada, August 2003. Schedule and Abstracts, p. 141–142.
- <u>Hallock, P.</u>, D.E. Williams*, S.K. Toler*, and H.K. Talge*, 2003. Bleaching and ozone depletion: A case study using the symbiont-bearing foraminifer *Amphistegina gibbosa*. 4th International Symbiosis Society Congress, Halifax, NS, Canada, August 2003. Schedule and Abstracts, p. 32.
- Obrochta**, S.P., Hine, A.C., Flower, B., Hallock, P., and Brooks, G.R., 2003, Quantification of the changing sedimentary architecture of a continental margin sediment drift as a result of the mid Pleistocene Climate Transition: EOS Trans. AGU, 84 (6), Fall Meet. Suppl. Abstract PP51C–0937, 2003.
- <u>Carnahan*, E.A.</u>, A.M. Hoare*, P. Hallock, B.H. Lidz, C.D. Reich, and E.A. Shinn. 2004. Foraminifera as Bioindicators of Heavy Metal Pollution in Biscayne Bay, Florida. 2004 Benthic Ecology Meeting, Mar. 25–28,2004, Mobile, Alabama, Program and Abstracts.
- <u>Daniels*, C.A.</u>, Hallock, P., and Lidz, B.H. (2004), Development and Application of the SEDCON Index for Resource and Risk Assessment of Coral Ecosystems, Eos Trans. AGU, 85(47), Fall Meet. Suppl., Abstract OS51C–1312.
- <u>Fisher*, E. M.,</u> Hallock, P., Woodley, C. M. 2004. Relationship between sedimentation and regeneration in M.\$3103.81BT1 0 0 1 99P., Woodley, CF492.29 \$8.31 Tm[]]TJETBT1 4eBT1 0 0 1 33703 \$2.87 m 02A 0 1 12 Tm[F)-2

- Meeting Abstracts (cont.)
- Woodley, C.M., J.C. Halas, P. Hallock-Muller, J.E. Fauth, C.A. Downs, E.M. Fisher*, S. L. Ryan, J.Halas. 2004. Integrating Marine technology into coral reef health assessment. 10th International Coral Reef Symposium, Okinawa, Japan, June 2004. Abstracts, p. 125.
- Carnahan*, E.A., Hoare*, A.M., Hallock, P., Lidz, B.H., Reich, C.D., Shinn, E.A. 2005. Foraminiferal Assemblages and Geochemical Properties of Sediments in Biscayne Bay, Florida. Geological Society of America Annual Meeting, Salt Lake City, Utah, October 2005.
- <u>Hallock, P.</u> 2005. Energetics in acclimation and adaptation to environmental extremes. Geological Society of America Annual Meeting, Salt Lake City, Utah, October 2005.
- <u>Fisher*, E.M.</u>, Hallock, P., and Woodley, C.M. 2005. Atlantic and Gulf Rapid Reef Assessment (AGRRA): A tool for multiscale studies of Florida Coral Reefs. Geological Society of America Annual Meeting, Salt Lake City, Utah, October 2005.
- McCloskey*, B.J., P. Hallock, R. Price**, T. Pichler. 2005. Foraminifera in extreme environments: How benthic populations react to exposure to high [As], low pH hydrothermal vent fluids in Papua New Guinea and in the laboratory. Geological Society of America Annual Meeting, Salt Lake City, Utah, October 2005.
- Mateu-Vicens*, G., P. Hallock, and M. Brandano. 2005. *Amphistegina*, Red Algae and Paleobathymetry: The Lower Tortonian Distally Steepened Ramp of Menorca, Balearic Islands (Spain); Geologic Problem Solving with Microfossils, Houston, Texas, March 6–11, 2005.
- Ayoub*, L.M, Hallock, P., Coble, P., Fisher*, E.M. 2006. Solar Irradiance In Coral Reefs: Modeling and Management Tools. Ocean Optics XVIII–Montreal, October 2006
- Carder, K.L., Reinersman, P.N., and Hallock, P. 2006. The UVB-PAR Environment About a Coral Head: A 3-D Model of Light Effects Related to the Bleaching of Corals and Foraminifera, Ocean Optics XVIII, Montreal, Canada, October 2006.
- Dupont*, J M; Hallock, P; Beaver, C; Jaap, W C. 2006. Effects of the 2005 red tide on epibenthic

- McCloskey*, B. J. and Hallock, P. 2007. Foraminiferal assemblage responses to naturally-induced high arsenic concentrations in a shallow-water hydrothermal system in northeastern Papua New Guinea. European Geosciences Union General Assembly, 15–20 April, Vienna, Austria, EGU2007-A-08541 (http://www.cosis.net/abstracts/EGU2007/08541/EGU2007-J-08541.pdf)
- Ramirez*, A., Ayoub*, L., Duncan Baker*, R., Hallock*, P. 2007. Foraminifers as indicators of photo-oxidative stress: Comparing bleaching prevalence in foraminifers with rates of decline in coral cover in the Florida Keys, USA. Geological Society of America Annual Meeting, Denver, CO, October 2007.

- <u>Martinez-Colon</u>*, M., Bortnak**, D., Williams*, R., Hallock, P. 2009. Morphometric analysis of the shells of Ammonia spp. from a polluted estuary, Torrecilla Lagoon, Puerto Rico. Geological Society of America, Annual Meeting, Portland, OR, 10/19/09.
 - http://gsa.confex.com/gsa/2009AM/finalprogram/abstract_162030.htm
- Crevison Souder*, H., <u>Hallock</u>, P., Byrne, R., McCloskey*, B.J. 2010. Shell anomalies in a population of *Archaias angulatus* from Florida (USA) sampled in 1982–83 and 2006–07. Forams 2010–International Symposium on Foraminifera, September 5–10, 2010, Bonn, Germany.
- Hallock, P. 2010. Sea Level Rise and Coral Reefs: Predicting Responses. Sea Level Rise 2010 Conference, Corpus Christi, Texas, March 1–3, 2010.
- Hallock, P. 2010. Evidence for environmental stress in *Amphistegina* shells. Forams 2010–International Symposium on Foraminifera, September 5–10, 2010, Bonn, Germany.
- Hallock, P. 2010. What Do Reef-Dwelling Foraminifera Reveal About Stressors of Coral Reefs? *Linking Science to Management:*

- <u>Martínez-Colón*</u>, M., Hallock, P., Green-Ruiz, C. 2011. Pollution and bioavailability of potentially toxic elements in Jobos Bay National Estuaries Research Reserve. ASLO Spring Meeting, San Juan, Puerto Rico, 02/2011.
- Ross*, B., Hallock, P. 2011. Acute and Sub-acute Effects of Exposure to Dispersant Chemicals on the Larger Foraminifer *Amphistegina gibbosa* (Abstract-Poster). Florida Association of Benthologists, Tampa, FL, October 26–28, 2011.
- Collins, L.S., Hallock, P., Pletka, C.R., Beck, K.D. 2012. Deep-water foraminiferal response to the catastrophic Deepwater Horizon Well oil spill, northeastern Gulf of Mexico. Geological Society of America Annual Meeting, Charlotte, NC, November 2012. https://gsa.confex.com/gsa/2012AM/webprogram/Paper212234.html
- Hallock, P., Pomar, L. 2012. Cenozoic evolution of carbonate shelf and ramp habitats: Insights from paleoceanography. AAPG Annual Convention, Long Beach, Ca., April 22–25, 2012. Hallock, P.

- Meeting Abstracts (cont.)
- Dimiza, M.D., Triantaphyllou, M.V., Koukousioura**, O.,Hallock, P., Athanasiou, M., Moumtzi, E., Simboura, N., Papathanasiou, E., Hallock, P. 2014. Benthic foraminiferal assemblages as an environmental proxy in coastal ecosystems: The case of Saronikos Gulf (Aegean Sea, Greece). In Marchant, M. & Hromic, T. (eds.) International Symposium on Foraminifera Forams 2014, Chile, 19–24 January 2014, Abstract Volume. Grzybowski Foundation Special Publication 20, p. 94. http://gf.tmsoc.org/Documents/Marchant+Hromic%202014%20GFSP20.pdf
- Hallock, P., McCloskey*, B.J., Engel*, B. 2014. Preservation Potential versus Survival: Insights from the Vicinity of a Hydrothermal Vent System in Papua New Guinea. In Marchant, M. & Hromic, T. (eds.) International Symposium on Foraminifera Forams 2014, Chile, 19–24 January 2014, Abstract Volume. Grzybowski Foundation Special Publication 20, p. 88. http://gf.tmsoc.org/Documents/Marchant+Hromic%202014%20GFSP20.pdf
- Hallock, P. 2014. Why has optimum habitat for stony corals diverged from that for foraminifers with algal symbionts on the Florida reef tract? 10th North American Paleontological Convention, Gainesville, FL, February 15–18, 2014. Abstract Book, p. 13.
- Fisher Moses*, E., <u>Hallock, P.,</u> Fauth, J.E., Woodley, C.M. 2014. Larger Benthic Foraminiferal Populations on the Florida Reef Tract Reveal the Interplay between Inshore and Offshore Environmental Stressors. Geological Society of America Annual Meeting, Vancouver, BC, Canada, October 2014.https://gsa.confex.com/gsa/2014AM/webprogram/Paper242914.html
- <u>Méndez-Ferrer</u>*, N and Hallock, P. 2014. Seasonal variation in the photosynthetic efficiency of algal symbionts in *Amphistegina gibbosa* (Foraminifera) in the Florida Keys. Ocean Science Meeting, Honolulu, Hawai'i.
- <u>Beckwith*, S.,</u> Hallock, P. 2015. Distribution of *Archaias angulatus* on the Inner West Florida Shelf: Substrata and Water Chemistry versus Temperature. Geological Society of America Annual Meeting, Baltimore, MD (poster). https://gsa.confex.com/gsa/2015AM/webprogram/Paper268867.html
- Brown*, E.A., Weinkauf, M.F.G., Hallock, P., Kucera, M. 2015. Assessment of the distribution of GlobigerTm[TJETBs

- Meeting Abstracts (cont.)
- Hallock, P., Mateu Vicens, G., Pomar, L. 2016. Why do coral reefs thrive in Icehouse World climates?

 Clues from larger benthic foraminifers. 13th International Coral Reef Symposium, Honolulu, HI. June 2016.
- <u>Hallock</u>, P. 2016. How basic life history studies can inform and guide "omics" and other technology-intensive research. Geological Society of America, Annual Meeting, Boulder Colorado, September 2016.
- <u>Méndez-Ferrer</u>*, N., Hallock, P., Jones, D. 2016. Photochemical efficiencies of diatom symbionts *in hospite* in *Amphistegina gibbosa* (Foraminifera) across seasons in the Florida Keys, USA. 13th International Coral Reef Symposium, Honolulu, HI. June 2016.
- <u>Pisapia</u>, C., Spezzaferri, S., El Kateb, A., Ibrahim, N., and Hallock, P. Foraminiferal bleaching in the Maldives: A tool to assess El Nino temperature-related coral bleaching? 13th International Coral Reef Symposium, Honolulu, HI. June 2016.
- Mendez-Ferrer, N.*, and Hallock, P. 2016. Changes in primary production as a result of symbiont-loss in the diatom-foraminifer holobiont *Amphistegina gibbosa* from the Florida Keys. (Invited Presentation). Geological Society of America, Annual Meeting, Boulder Colorado, September 2016.
- Ross, B.J.*, and Hallock, P. 2016. Observations of the symbiont-bearing foraminifer *Amphistegina gibbosa* utilizing cell-tracker green and epifluorescent microscopy. Geological Society of America, Annual Meeting, Boulder Colorado, September 2016.
- Spezzaferri, S., Pisapia, C., <u>El Kateb</u>, A., Ibrahim, N., and Hallock, P. 2016. Assessing coral reef health in the North Ari atoll, Maldives using the Foram Index. 13th International Coral Reef Symposium, Honolulu, HI. June 2016.

Invited Lectures (cont).

September 1988

Recognizing paleonutrient influence on carbonate platform drownings in the geologic record. Global Sedimentary Geology Program: Cretaceous Resources, Events and Rhythms-Working Group 4: Development and Demise of Carbonate

Platforms, Marseilles, France.

Platforms of the Nicaraguan Rise: Examples of the sensitivity of carbonate March 1989

sedimentation to excess nutrients.

Invited Lectures (cont). Bleaching in Reef-Dwelling Foraminifera. Department of Geology and Geophysics September 1996 1996–97 L.J. Wilbert Lecture Series, Louisiana State University, Baton Rouge, Louisiana. November 1996 Nutrients, Coral Reefs and Carbonate Sedimentation Revisited. Department of Marine, Earth and Atmospheric Sciences, North Carolina State University, Raleigh, North Carolina. February 1997 Bleaching in Reef-Dwelling Foraminifera. Department of Geology, University of Georgia, Athens, Georgia. February 1997 Bleaching in Reef-Dwelling Foraminifera: Is Ozone Depletion the Cause? Cause Seminar Series, Department of Geosciences and Earth System Science, Penn State University, University Park, Pennsylvania. Series of lectures presented to Petrobras and City University, Rio de Janeiro, May 1997 Brazil, May 28-30, 1997 Lecture 1. Coral Reef Decline: Causes and Implications Lecture 2. Nutrients and Carbonate Sedimentation Lecture 3. Larger foraminifera as Environmental Indicators for Coral Reefs Lecture 4. Larger Foraminifera as Tools for Paleoenvironmental Interpretation February 1998 Habitats of Modern Larger Foraminifera: Taxonomic, Depth and Regional Comparisons. Tertiary to Recent Larger Foraminifera: Their Depositional Environments and Importance as Petroleum Reservoirs-Conference/Workshop. Kingston University, UK. Larger Foraminifera as Indicators of Coral Reef Vitality. Department of Geological September 1998 Sciences, University of Texas at Austin. September 1998 Nutrients and Carbonate Sedimentation. Department of Geological Sciences, University of Texas at Austin. Senior Women in Academia: What are Role Models Worth? Association for September 1998 Women Geoscientists, Lone Star Chapter, Austin Texas. Senior Women in Academia: What are Mentors and Role Models Worth? January 1999 Women's Campus Collective, University of South Florida-St. Petersburg. February 1999 Nutrients and Carbonate Sedimentation. Department of Geology, University of South Florida, Tampa. Senior Women in Academia: What are Mentors and Role Models Worth? March 1999 Association for Women Geoscientists, South Florida Chapter-Tampa. Senior Women in Academia: What are Mentors and Role Models Worth? **April 1999** American Association for University Women Clearwater, Florida Chapter Careers Panelist, Feminist Majority, New College/USF Sarasota Campus **April 1999** Coral Reefs, MarineQuest, Florida Department of Environmental Protection, St. **April 1999**

Petersburg, FL.

Coral Reefs and Global Change. U.S. Environmental Protection Agency May 1999

Conference on Global Change: What does it mean for the Florida Keys?

Marathon, FL.

October 1999 Senior Women in Science: What are Mentors and Role Models Worth?

Association for Women Geoscientists, Denver, Colorado.

November 1999 Coral Reefs, Nutrients and Global Change, Department of Geology, University of

Montana, Missoula.

November 1999 Senior Women in Academia: What are Mentors and Role Models Worth?

American Association of University Women, Vero Beach Chapter.

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Invited Lectures (cont). March 2000 "The 1998 Class Action Gender Discrimination Case Against the University of South Florida: The Data and the Outcome" To: The Florida International University Chapter of the United Faculty of Florida, Miami, Florida. "Larger Foraminifera as Indicators of Reef Vitality". Department of Geology March 2000 Seminar, Florida International University, Miami, Florida. April 2000 "Senior Women in Academia: What are Mentors and Role Models Worth?" To: American Association of University Women-Naples Beach Chapter, Naples, FL. "Coral Reefs in the 21st Century: Is the past the Key to the Future?" 10th Symposium on the Geology of the Bahamas, San Salvador, Bahamas. June 2000 August 2000 Foraminifera as Bioindicators in Coral Reef Ecosystems: The FoRAM Protocol. Keynote Speaker at AMEP-2000, Application of Micro and Meioorganisms to Environmental Problems, Winnipeg, Manitoba, Canada, August 28-31, 2000. October 2000

Invited Lectures (cont).

January 2005 Distinguishing Local from Global Stresses: Low-Cost Tools for Reef Monitoring

and Risk Assessment. Brown-bag seminar, Department of Geology, University of

Missouri, Kansas City, Missouri. Coral Reefs in the 21st Century: Is the Past the Key to the Future? AWG

Distinguished Lecture, University of Missouri, Kansas City, Missouri. February 2005

Environmental Monitoring and Risk Assessment of Coral Reefs: A Multi-Scale

Approach. Fort Johnson Marine Science Seminar Series, Charleston, SC

Distinguishing Local from Global Stresses: Low-Cost Tools for Reef Monitoring February 2005

and Risk Assessment. AWG Distinguished Lecture, University of Utah, Salt Lake

City, Utah.

Coral Reefs in the 21st Century: Is the Past the Key to the Future? AWG December 2005

Distinguished Lecture: Geoscience Colloquium, University of Arkansas,

Fayetteville.

May 2006 Coral Reefs in the 21st Century: Is the Past the Key to the Future?;

Distinguishing Local from Global Stresses: Low-Cost Tools for Reef Monitoring and Risk Assessment; and Causes and Consequences of Bleaching in Reef-Dwelling Foraminifer-three lectures as part of a short course on Environmental

Micropaleontology at the University of Athens, Greece.

Plenary Speaker: Bleaching in Foraminifera with Algal Symbionts: Implications for September 2006

Reef Monitoring and Risk Assessment. FORAMS 2006, Natal, Brazil.

Coral Reefs in the 21st Century: Is the Past the Key to the Future? AWG October 2006

Distinguished Lecture: Geoscience Colloquium, Kent State University, Ohio.

November 2006 Bleaching in Foraminifera with Algal Symbionts: Implications for Reef Monitoring

and Risk Assessment.

Coral Reefs in the 21st Century: Is the Past the Key to the Future? St. Petersburg February 2007

Audubon Society, St. Petersburg, Florida. Coral Reefs in the 21st Century: Is the Past the Key to the Future? Mote Marine July 2007

Laboratory, Sarasota Florida.

Coral Reefs in the 21st Century: Is the Past the Key to the Future? AWG September 2007

Distinguished Lecture: Eckerd College, St. Petersburg, Florida.

February 2008 Using Foraminifers as Bioindicators for Coral Reefs and Other Tropical Coastal

Environments: the Potential and the Challenges. Plenary Address, Fifth

International Conference "Environmental Micropaleontology, Microbiology and Meiobenthology" (EMMM'2008), University of Madras, Chennai, India, February

2008 (delivered remotely by video).

February 2009

March 2010 Coral Reefs in the 21st Century: Is the Past the Key to the Future? AWG Distinguished Lecture for Department of Earth Sciences, Montana State University, Bozeman, MT. March 2010 Coral Reefs in the 21st Century: Is the Past the Key to the Future? AWG Distinguished Lecture for Department of Geology, University of Montana, Missoula, MT. Invited Lectures (cont). April 2010 Goldilocks and the Three Biogenic Carbonate Minerals: What Determines "Just Right"? Department of Geology, University of Cincinnati, Ohio. May 2010 Plenary Lecture: Cenozoic Evolution of Benthic Carbonate Systems: Solving Paradoxes to Understand the Past and Predict the Future. International Conference: The Colors of Cretaceous and Paleogene Oceans in Honor of Isabella Premoli Silva, Verbania, Italy. October 2010 Coral Reefs in the 21st Century: Is the Past the Key to the Future? Aquatic Animal Health Program, University of Florida, Gainesville. January 2011 Coral Reefs in the 21st Century: Is the Past the Key to the Future? Pasco County Environmental Lands Education Program, New Port Richey, Florida. Coral-Reefs of the 21st Century: Is the Past the Key to the Future. Environmental March 2011

Science and Policy, USF-

Invited Lectures (cont).

Modern Coral Reefs Under Global Change: Lessons from Goldilocks. AWG Distinguished Lecture, Colby College, Maine.

Two lectures: Cenozoic Trends in Shallow— April 2014

March 2016

Invited Workshop or Committee Participation

NOAA–NURP Workshop on Coral Reef Research and Management in the Florida Keys, June 1988. Global Sedimentary Geology Program (GSGP)–Cretaceous Resources, Events and Rhythms (CRER) Workshop, Carbonate Platforms Working Group, Marseilles, France, September 1988.

NSF/EPA/NOAA–sponsored Workshop on Coral Bleaching/Coral Reef Ecosystems and Global Change, Miami, Florida, June 1991.

NOAA-NURC/UNCW-sponsored Florida Keys Nutrient Workshop, Key Largo, June 1991.

EPA-sponsored Coral Community Assessment Workshop, Water Quality Protection Program for the Florida Keys National Marine Sanctuary, February 1992.

GSGP-CRER Workshop, Carbonate Platforms Working Group, Tremp, Spain, September 1992. International Environmental Education Seminar for Women, sponsored by Pan Pacific and South East Asia Women's Association (PPSEAWA) chapter from the Republic of China, in cooperation with PPSEAWA International (a UNESCO chartered organization), Taipei, Taiwan, August 1993.

NOAA-NURP Gulf of Mexico Workshop, New Orleans, Louisiana, May 1994.

NOAA/EPA A Coral Reef Symposium on Methods for Assessing the Biota and Habitat Conditions of Coral Reefs. Annapolis, MD, January 26–27, 1995.

Coral and Live Bottom Habitat Sub–Group Workshop, South Atlantic Fishery Management Council, September 16–17, 1997, in St. Petersburg, Florida.

Invited Workshop or Committee Participation (cont.)
Satellites to Molecules: Strategies and Tools for Reef Monitoring & Risk Assessment. Shortcourse on Environmental Micropaleontology—