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

Curriculum Vitae

General Data

Name: Pamela Hallock Muller
Address: College of Marine Science Initial Date of USF Employment/August 1983

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

Institution	<u>Field of</u> <u>Study</u>	<u>Degree</u>	<u>Date</u>
University of Montana, Missoula	Zoology	B.A.	June 1969
University of Hawaii, Honolulu	Oceanography	M.S.	May 1972
University of Hawaii, Honolulu	Oceanography	Ph.D.	May 1977

Employment

2001-Present	Professor, College of Marine Science, University of South Florida, St. Petersburg, FL
1988–2001	Professor, Department of Marine Science, University of South Florida, St. Petersburg, FL
1983-1988	Associate Professor, Department of Marine Science, University of South Florida,
	St. Petersburg, Florida
1979-1983	Assistant Professor, Faculty of Earth Sciences, The University of Texas of the
	Permian Basin, Odessa, Texas
1978–1979	Visiting Assistant Professor, Faculty of Earth Sciences, The University of Texas
	of the Permian Basin

Postdoctoral Research

Institute for Historical Geology and Paleontology, University of Copenhagen, Denmark (1978) Institute of General Microbiology, Kiel University, Federal Republic of Germany (1979)

Field Research

Chief Scientist or Co-Chief Scientist on nine research cruises, participant on ten others, including IODP Leg 194.

Extensive field experience (40+ years) using SCUBA and enriched air (NITROX) in reef areas worldwide, including 10–day saturation mission in 1994.

Areas of Specialization

Role of nutrients, light, and ocean chemistry in coral reefs, carbonate sedimentology, and paleoceanography; role of algal symbiosis in carbonate production, community structure, and evolution. Biology/paleobiology/ecology/paleoecology of larger Foraminifera, including distributions, population dynamics, and functional morphologies, with applications in studies of environmental quality (e.g.,

bioindicators), paleoenvironments, carbonate sedimentation, and global environmental change.

Honors, Awards, Biographies

1965–1969 1966 1968 1968	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
1971–1973 1976	National Science Foundation Traineeship, University of Hawaii ARCS Foundation Scholarship for a graduate student in the sciences, University of Hawaii
1979, 1982	Nominee for Outstanding Teacher at the University of Texas of the Permian Basin.
1981	Listed in Outstanding Young Women of America
1987	NASA/ASEE Summer Faculty Fellowship
1991	Listed in American Men and Women of Science & Who's Who in American Women
1994	W. Storrs Cole Memorial Research Award, Geological Society of America
1995-present	Listed in Who's Who in America
1999	Association for Women Geoscientists Outstanding Educator Award
2000	Keynote Speaker, 10 th Symposium on the Geology of the Bahamas
2000-present	Distinguished Speaker Program, Association for Women Geoscientists
2002	USF Outstanding Research Achievement Award
2012	Elected Fellow, The Paleontological Society
2012	Alfred P. Sloan Foundation Minority Ph.D. Program's Mentor of the Year
2013	Recognized as one of the Top 25 Women Professors in Florida.
2013–14	USF–CMS Graduate Mentor of the Year
2015	Joseph A. Cushman Award for Excellence in Foraminiferal Research
2016	USF Graduate Mentor of the Year
2018	Albert Nelson Marquis Lifetime Achievement Award
2018	Kosove Distinguished Graduate Teaching and Service Award
2018	Hallock & Schlager (1986) named one of ten "Landmark Papers in Carbonate
	Sedimentology and Stratigraphy" by the American Association of Petroleum Geologists
2019	Raymond C. Moore Medal for Excellence in Paleontological Research, Society for
	Sedimentary Geology

Professional Organizations and Offices

Cushman Foundation for Foraminiferal Research (Board of Directors 1990–2020; Vice President 1994, 2010; President 1995–96; 2011)

Geological Society of America-Fellow (W.Storrs Cole Award Selection Committee: 2003-15)

Paleontological Society-Fellow (Schuchert Award Committee: 1996-97; Strimple Award Committee:

2013-15; Fellows and Medalist Recommendation Committee: 2016-2017)

Association for Women Geoscientists (Member); Distinguished Speaker List:1999-2021

Association for Women in Science (Member)

American Academy of Underwater Sciences (Member)

(Technical Chair-"Diving for Science in the 21st Century", the 20th Annual AAUS Symposium, 2000)

SEPM-Society for Sedimentary Geology including North American Micropaleontological Section

(Permian Basin Section-Technical Editor of annual guidebooks 1981, 1982; Second Vice

President 1982–83; Publicity Chair for 1995 SEPM Congress on Sedimentary Geology;

Executive Council-Paleontology Councilor 1997-99; Moore Medal Selection Committee

Chair 1997–99; AGI Representative 1998–99; Nominations Committee 2002)

Member, International Society for Micropaleontology, Microbiology and Meiobenthology:

Member, Organizing Committee, EMMM'2002, Vienna, Austria, September 2002.

American Geophysical Union/AGU (Member)

American Society of Limnology and Oceanography/ASLO (Member)

Invited Member, International Scientific Advisory Board for the Leibniz Center for Marine Tropical Marine Research (ZMT), in Bremen, Germany, 2011–2019

Member, Scientific Organizing Committee, Forams 2014–International Symposium on Foraminifera, Concepcion, Chile, January 2014; Forams 2018–Edinburgh, Scotland

Member, Scientific Organizing Committee, Member of the Scientific Committee of the 3rd Conference of the Arabian Journal of Geosciences (CAJG), held online, on 2–5 November 2020

Editorial Boards:

Associate Editor—Journal of Foraminiferal Research (1985–2003)
Associate Editor for Larger Foraminifera—Journal of Foraminiferal Research (2004–2014, 2019–)
Editor—Journal of Foraminiferal Research (2015–2018)
Editorial Board—Marine Micropaleontology (1990–2012)
Editorial Board—Geology (1996–1998)

Teaching and Other Instructional Activities

Course Instruction-University of Texas of the Permian Basin (1978–1983):

Junior-level courses: Introduction to Paleontology, Biostratigraphy, Stratigraphy, Minerals and Rocks, Scientific Writing, Statistics.

Senior-level courses: Sedimentology, Micropaleontology, Paleoecology, Oceanography. Graduate-level courses: Advanced (Carbonate) Stratigraphy, Clastic Depositional Systems.

Course Instruction—University of South Florida (1983—present)

Senior-level courses: Geology of Florida; Coral Reefs: Past, Present, Future; Coral Biology and Reef Ecology

Graduate-level courses: Paleoceanography, Marine Micropaleontology, Biogenic Sedimentation, Marine Paleoecology, Evolution and Ecology of Reefs, Foraminiferal Biology, Quantitative Ecology Seminar, Topics in Reef Research, Surveying Natural Populations, Carbonate Sediments and Ocean Acidification, Carbonate Sediments in Geological History, Writing a Scientific Paper

Selected Lectures in Team-taught Graduate-level Courses: Biological Oceanography, Geological Oceanography, Foundations in Biological and Fisheries Oceanography, Dynamics of Marine Ecosystems

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-1985
- 4. Joan Hutton-Marine Science-1986
- 5. David Mearns-Marine Science-1986
- 6. Theresa Cottey-Marine Science (Chair)-1987
- 7. Jennifer McNeillie-Marine Science-1987
- 8. Nina Triffleman-Marine Science (Chair)-1989
- 9. Mark Flock-Marine Science-1989
- 10. Helen Tal-Marine Science (Chair)-1991
- 11. Michael Harris-Marine Science-1992
- 12. Kelly Boomer Donnelly-Marine Science (Chair)-1993
- 13. Strawn Knaup Toler-Marine Science (Co-Chair)-1993
- 14. Elizabeth Cockey-Marine Science (Chair)-1994
- 15. Julie Garrett-Marine Science (Co-Chair)-1994
- 16. Jodi Harney–Marine Science (Chair)–1996
- 17. Merrie Beth Neelev-Marine Science-1996
- 18. Kathryn Fitzsimmons-Marine Science (Chair)-1996
- 19. Patty Pratt-Marine Science-1997
- 20. Andrea Mosier-Marine Science-1998
- 21. Dawn Olson-Marine Science (Co-Chair)-1998
- 22. Fred Stengard-Marine Science-1998
- 23. Jennifer Cummins-Marine Science-2000
- 24. Matthew Patterson-Marine Science (Chair)-2000
- 25. Nicole Turkson-Marine Science (Chair)-2000
- 26. David Palandro-Marine Science-2000
- 27. Elizabeth Merman-Marine Science-2000
- 28. Heidi Crevison-Marine Science (Chair)-2001
- 29. Keith Hackett-Marine Science (Chair)-2002
- 30. Ana Coye Hoare-Marine Science (Chair)-2002
- 31. Jennifer Jacukiewicz-Marine Science (Chair)-2002
- 32. Matthew Lybolt-Marine Science (Chair)-2003
- 33. Elizabeth Tyner-Marine Science-2003
- 34. Donna O'Dell Berns-Marine Science-2003
- 35. Stephen Obrochta-Marine Science-2004
- 36. Kathryn Sheps-Marine Science (Chair)-2004
- 37. Robert Walker-Marine Science (Chair)-2004
- 38. Michael Callahan-Marine Science (Chair)-2005
- 39. Elizabeth Carnahan-Marine Science (Chair)-2005
- 40. Camille Daniels-Marine Science (Chair)-2005
- 41. Andrew Farmer-Marine Science-2005
- 42. Martin Montes-Hugo-Marine Science-2005
- 43. Elizabeth Schlansky Singh-Marine Science-2005
- 44. Nicole Caesar-Marine Science (Chair)-2006
- 45. Dana Gaydos-Marine Science (Chair)-2006
- 46. Stephen Gustafson-Marine Science (Chair)-2006
- 47. Inia Soto-Marine Science-2006
- 48. Kate Ciembronowicz-Marine Science-2007
- 49. Kris Stair-Marine Science-2007

Master's Thesis Advisory Committees (cont.)—University of South Florida—completed

- 50. Karen Atwood-Marine Science (Co-chair with G. Vargo)-2008
- 51. Rebecca Baker-Marine Science (Chair)-2008
- 52. Alexa Ramirez-Marine Science (Chair)-2008
- 53. Kelley Anderson-Marine Science (Chair)-2008
- 54. Ian Dow-Marine Science-2008
- 55. Ryann Williams-Marine Science (Chair)-2009
- 56. Brienne Engel-Marine Science (Chair)-2010
- 57. Michael Drexler-Marine Science (Chair)-2011
- 58. Adrienne George-Marine Science (Chair)-2011
- 59. Christy Stephenson-Marine Science (Chair)-2011
- 60. Amy Wallace-Marine Science (Chair)-2011
- 61. Kathryn Wirt-Marine Science (Chair)-2011
- 62. Kristy Menning-Integrative Biology-2012
- 63. Bridget McCrickard Mathers-Marine Science (Chair)-2012
- 64. Mark Hartman-Marine Science (Chair)-2012
- 65. Benjamin Ross-Marine Science (Chair)-2012
- 66. Heidi Toomey-Marine Science (Chair)-2013
- 67. Kristin Netchy-Marine Science (Chair)-2014
- 68. Lucy Bartlett-Marine Science (Chair)-2014
- 69. Heather Bender-Geology-2015
- 70. Stephanie Lawler-Marine Science-2016
- 71. Sean Beckwith-Marine Science (Chair)-2016
- 72. Catherine Smith-Marine Science (Chair)-2016
- 73. Jennifer Brizzolara-Marine Science-2017
- 74. Kara Wall-Marine Science-2017
- 75. Erin Cuyler-Marine Science-2017
- 76. McKenna Martin-Marine Science (Chair)-2018
- 77. Katie Davis-Marine Science-2018
- 78. Christian Gfatter-Marine Science (Chair)-2018
- 79. Elizabeth Simpson Viau-Marine Science-2019
- 80. Kate Dubickas-Marine Science (Co-chair)-2019
- 81. Kyle Amergian-Marine Science (Chair)-2019

Master's Thesis Committees in progress

Megan Ferguson-Marine Science Tiffany Boisvert-Marine Science

Master's Thesis Examination Committees-International

- Martina de Freitas Prazeres, Programa de Pós-Graduação em Oceanografia Biológica, Universidade Federal do Rio Grande, Rio Grande do Sul, Brazil-2011.
- Joseane Aparecida Marques, Programa de Pós–Graduação em Oceanografia Biológica, Universidade Federal do Rio Grande, Rio Grande do Sul, Brazil–2014.
- 3. Stephanie Vivien Hyman, College of Agriculture, Engineering and Science, University of Kwazulu–Natal, Durban, South Africa–2015.
- 4. Roselyn Naidu, University of the South Pacific, Fiji-2015

Doctoral Dissertation Advisory Committees-University of South Florida-completed

- 1. Gregg Brooks-Marine Science-1986
- 2. James Gibeaut-Marine Science-1991
- 3. Evamaria Koch-Marine Science-1993
- 4. J. William Louda-Marine Science-1993

5. Mark Peebles-Marine Science (Chair)-1993

- 6. Stephen W. Snyder-Marine Science-1994
- 7. David Mallinson-Marine Science-1995
- 8. Eunil Lee-Marine Science-1996
- 9. Marguerite Toscano-Marine Science-1996
- 10. Kimberly Yates-Geology-1996
- 11. David Duncan-Marine Science-1997
- 12. Dale Griffin-Marine Science-1999
- 13. Erin Lipp-Marine Science-1999
- 14. Renate Bernstein-Marine Science-2000
- 15. Thomas Dix-Marine Science (Chair)-2001
- 16. Kim Donaldson-Marine Science-2001
- 17. Melanie Dotherow-McField-Marine Science (Chair)-2001
- 18. Pamela Sutton-Marine Science-2001
- 19. Helen Talge-Marine Science (Chair)-2002
- 20. Strawn Toler-Marine Science (Chair)-2002
- 21. Dana Williams-Marine Science (Chair)-2002
- 22. Bret Jarrett-Marine Science-2003
- 23. Anne McMillan-Jackson-Biology-2003
- 24. Stephaney Shehane-Marine Science-2003
- 25. Lauren McDaniels-Marine Science-2005
- 26. David Palandro-Marine Science-2006
- 27. Elizabeth Fisher-Marine Science (Chair)-2007
- 28. Roy Price-Geology-2008
- 29. Armando Hoare-Mathematics/Applied Statistics-2008
- 30. Teresa Greely-Science Education-2008
- 31. Lore Ayoub-Marine Science (Paula Coble, Co-chair)-2009
- 32. Jennifer Dupont-Marine Science (Chair)-2009
- 33. Bryan McCloskey-Marine Science (Chair)-2009
- 34. Heidi Souder-Marine Science (Robert Byrne, Co-chair)-2009
- 35. James Ivey-Marine Science-2009
- 36. David Karlen-Biology-2010
- 37. Sarine Manoukian-Marine Science-2011
- 38. Julie Galkiewicz-Marine Science (Chair)-2011
- 39. Camille Daniels-Marine Science (Co-chair with Mya Breitbart)-2011
- 40. Patrick Schwing-Marine Science-2011
- 41. Daniel Otis-Marine Science-2012
- 42. Paul Suprenand-Marine Science (Co-chair with JJ Torres)-2013
- 43. Luis Miranda-Marine Science-2013
- 44. Regina Easley-Marine Science-2013
- 45. Lara Henry-Marine Science (Co-chair with JJ Torres)-2013
- 46. Brian Barnes-Marine Science-2013
- 47. Candace Simmons-Marine Science-2013
- 48. Mark Patsavas-Marine Science-2014
- 49. W. Noland Elsaesser-Marine Science (Co-chair with N. Blake)-2014
- 50. Paul Knorr-Geology-2014
- 51. Bo Yang-Marine Science-2015
- 52. Katherine Wirt-Marine Science-2016
- 53. Kwasi H. Barnes-Marine Science-2016
- 54. Natasha Mendez-Ferrer-Marine Science-2016

Doctoral Dissertation Advisory Committees-University of South Florida-completed (cont.)

- 55. Michael Martinez-Colon-Marine Science-2016
- 56. Maria Vega-Rodriguez-Marine Science-2016
- 57. Shane Dunn-Marine Science-2016
- 58. Josh Breithaupt-Marine Science-2017
- 59. Adrienne George-Marine Science (Chair)-2017
- 60. Nora (Katie) Douglas-Marine Science-2018
- 61. Christian Haller-Marine Science (Co-Chair)-2018
- 62. Elizabeth Brown-Marine Science (Chair)-2018
- 63. Benjamin Ross-Marine Science-(Chair)-2018
- 64. Selena Kupfner Johnson-Marine Science (Chair)-2019

<u>Dissertation Committees</u>—in progress

Natalia Lopez-Figueroa-Marine Science (Chair)

Savanna Hartman-Marine Science

Cara Estes-Marine Science

Juan Millan-Otoya-Marine Science

Florida International University

Maria Sider-Geosciences

Dissertation Defense Chair

Nicholas Curtis-USF Department of Biology-2006

Keith Hackett-USF Department of Mathematics and Statistics-2011

Michael Middlebrook-USF Department of Integrative Biology-2012

Doctoral Dissertation Advisory Committees-Other Universities

University of Calcutta (External Examiner)

- 1. Mrinal Khanti Ghosh-Zoology-1988
- 2. Sri Sabyasachi Majumdar-Marine Science-2003

University of Tennessee at Knoxville (Outside Reader)

3. Jonathan Bryan-Geology-1991

James Cook University, Townsville, Australia ((External Examiner)

4. Melissa Lobegeier-Earth Sciences-2001

Universitat de les Illes Balears, Spain (Co-advisor)

5. Guillem Mateu Vincens-Biology-2007

University of Miami, Miami, Florida-2011 (Committee Member)

6. Rebecca Albright-RSMAS

University of Queensland, Australia (Independent Examiner)

7. Yogeeta Roshni Narayan-2011

Macquerie University, NSW, Australia (Independent Examiner)

8. Briony Mamo-2011

University of Technology, Sydney, NSW, Australia (External Examiner)

9. Sutinee Sinutok-2012

University of Queensland, Australia (Independent Examiner)

10. Joost Wijtze van Dam-2013

Ain Shams University, Egypt (Dissertation Committee Member)

11. Safeya Gaber Abdullah Almenoufy-2014

Pondicherry University, Pudhucherry, India (External Examiner)

12. P. Mothilal Yuvaraja-2014

Utrecht University, The Netherlands (External Examiner)

13. Vibor Novak-2014

Universitat Autònoma de Barcelona, Spain (External Examiner)

14. Maria Eugenia Arriaga Cavalieri-2016

King Fahd University of Petroleum and Minerals, Dhahran, Saudi

15. Abduljamiu Olalekan Amao-2017 (Dissertation Committee Member)

University of Bremen and ZMT, Germany (Dissertation Committee Member)

16. Marleen Struh-January 2018

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

Ana Hoare, MSc 2002

Nicole Caesar, MSc 2006

Alexa Ramirez, M.S. 2008

Kwasi Barnes, PhD 2016

Postdoctoral Researchers Hosted or Supervised:

Niyazi Avsar, Gukurova University, Turkey-1986

Eulalia Gili-Folch, Autonoma University of Barcelona, Spain-1991

Bayu Ludvianto, Benkulu University, Indonesia-1996-97

Timothy Ourbak, CMS-USF Endowed Postdoctoral Researcher-2007-2008 (Co-advisor)

Jennifer Dupont-Knauss Fellow-2009-10

Julia Galkiewicz-Knauss Fellow-2012-13

Predoctoral Visiting Researchers (including "Sandwich" Scholars) Hosted/Supervised:

Kazuhito Fujuta, Tohuku University, Sendai, Japan-1998

Maria Elena Chávez-Marrero, Instituto de Ocenologia, Reparto Flores, Cuba-2003

Guillem Mateu-Vincens, Universitat de les Illes Balears, Spain-2003, 2005, 2006

Shi Yu-kun, Nanjing University, China-2007-08

Antje Funcke, University of Brehmen, Germany-2009-10

Imam Bachtiar, Bogor Agricultural University, Indonesia-2009-10

Martina De Freitas Prazeres, University of Rio Grande dul Sul, Brazil-2011

Maria Eugenia Arriaga Cavalieri, Universitat Autònoma de Barcelona, Spain-2014

Marleen Struh, University of Bremen and ZMT, Germany-2014, 2015

<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 University of Texas of the Permian Basin (1982–83)

University of South Florida (*Current)

Department of Marine Science Space Committee (1983-87)

Department of Marine Science Budget Committee (Chair) (1984–87)

Department/College of Marine Science Admissions and Awards Committee (1984–2003)

*Dept/College of Marine Science Tenure and Promotion Committee (1986–), Co-chair (2017–21)

Department of Marine Science Curriculum Committee (Chair) (1987–92)

Department/College of Marine Science Scientific Diving Committee (Chair) (1987-02)

Marine Science School/College Initiative Committee (1988–90)

Department of Marine Science Faculty Recruiting Committee (1989–97, Chair 1995–97)

Department of Marine Science Search Committee for Physical Oceanographer (1995)

Department of Marine Science Search Committee for Marine Geologist (Chair 1995–96)

Department of Marine Science Search Committee for Marine Geochemist (1996)

Department/College of Marine Science Faculty Evaluation Committee (1990-Chair, 1992, 1994, 1996,

2002, 2006-Chair, 2008, 2009-chair; 2012, 2013; 2018, 2019-chair, 2020)

Department of Marine Science PEP Evaluation Committee (1996, 1998-Chair)

Department of Marine Science Personnel Committee (1989–97)

College of Arts and Sciences Graduate Curriculum Committee (Chair-1990-92)

*University Diving Control Board (Member 1987–2021; Chair 1992–99)

University Search Committee, Dean of Arts and Sciences (Member 1989–90)

Search Committee, Dean of St. Petersburg Campus (Substitute Member 1991)

University of South Florida Research Council (Member 1992–96)

University of South Florida Status of Women Committee (Member 1998–2001)

Biology Department Search Committee for a Marine Ecologist (Member 1999)

College of Marine Science Transition Planning Committee (Member 2000)

Dean's Advisory Council, College of Marine Science (Member 2000–2002; 2007–09)

College of Marine Science Search Committee for Biological Oceanographer (2002-05)

College of Marine Science Evaluation Oversight Committee (Chair-2003-05; Member-2012-13)

Search Committees for Dean of the College of Marine Science (2006–2008; 2010)

Member, USF Task Force Steering Committee on Faculty Roles, Responsibilities and Rewards; Rewards Working Group Chair (2008–09)

CMS Search Committee for Remote–Sensing Oceanographer and Fish Ecologist (2008–09)

CMS Center for Ocean Technology Advisory Committee (2008–09)

CMS Search Committee for a Paleoclimatologist (2010–11)

CMS Ad-Hoc Committee on Undergraduate Teaching (2011–12)

CMS Search Committee for a Paleooceanographer (2012–13)

CMS Dean's Advisory Council, College of Marine Science (Chair 2012–14)

CMS Search Committee for a Biological Oceanographer (2014–15)

*USF Graduate Council, including Policy and Curriculum Committee (Member 2005–08, 2009–12, 2014–21; Co-chair of Curriculum 2010–12)

CMS Search Committee for a Chemical Oceanographer (2015–16)

CMS Curriculum Committee (Member 2011–21)

CMS 50th Reunion Committee (Co-chair 2016–17)

USF Office of Research Integrity & Compliance: Investigation Panel on Research Misconduct (2020-21)

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 Biscayne, 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 Moustafa, West Palm Beach, Florida, 2005, 2006, 2007, 2008 winner of Senior Division Zoology and 2005 Best of Show, Florida State Science Fair

Expert Judge or Science Judge, Spoonbill Bowl (West Florida Regional qualifier for the National Ocean Science Bowl)—annually, 2006–2010 and 2012–**2020**; also includes reviewing questions prior to the competition.

Expert Judge, National Ocean Science Bowl-2011

Presentation and Writing Coach, McKnight Doctoral Fellowship Program Mid-Year Meeting Research and Writing Conference, 2012, 2013.

Great American Teach In–Presented talks on careers in science at the Thonotosassa Community Middle School, 10/2015

Camper Interviews, Oceanography Camp for Girls, nearly every year since the camp began in 1991. Reviewer of student applications for the MSPHD program, a nation—wide program aimed at enhancing success in graduate students from underrepresented minorities, annually 2010–2015

Member, Co-organizer of the Salty Dogfish Team for the Tampa Bay SPCA Petwalk–1990s to 2019. Member and participant in ARCS Tampa Bay, a local chapter of ARCS National that raises funds to support graduate students in STEM disciplines (through 2017).

Participant in the Southeastern Guide Dogs Walkathon 2017–2020.

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.
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- Hallock, P., Robbins, L., Larson, R., Beck, T., Schwing, P., Martínez-Colón, M. and Gooch, B. 2010, West Florida shelf: A natural laboratory for the study of ocean acidification: U.S. Geological Survey Open-File Report 2010–1134.
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- 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.
- Coiling direction in *Amphistegina*. Co-investigator. Danish Natural Science Research Council, Copenhagen, Denmark. January–April 1978; 2,400 DKr.
- Depth adaptation in *Heterostegina*: changes in test shape. Co-investigator. Deutscher Akademischer Austauschdienst, Bonn, Federal Republic of Germany. June–August 1979; 2,400 DM.
- The effects of vegetation on spectral signatures at Coyanosa Test Site. Principal Investigator. NASA/GEOSAT Test Case Program. July 1980–December 1981; \$3,600.
- Paleodepth studies of symbiont-bearing, benthic foraminifera. Principal Investigator. National Science Foundation EAR-8026459. July 1981–November 1983; \$30,000.
- Instrumentation for paleodepth studies of symbiont-bearing foraminifera. Principal Investigator. National Science Foundation PRM–8112906. July 1981–June 1982; \$9,500.
- Environmental influence of test morphology in soritid foraminifera from Key Largo, Florida. Principal Investigator. University of South Florida Faculty Research and Creative Scholarship. March 1984–May 1985; \$3,600.
- Comparison of living and total assemblages of larger foraminifera from middle and outer shelf habitats of the Tortugas area. Principal Investigator. Florida Institute of Oceanography (ship time on R/V <u>Bellows</u>). September 1984; \$9,250.
- Effects of particulate organic carbon on calcium carbonate deposition in Caribbean reef systems. Principal Investigator. National Science Foundation EAR–8407781. January 1985–June 1987; \$85,400.
- Travel to the VII International Congress of Protozoology, Nairobi, Kenya, June 1985. University of South Florida Faculty Foreign Travel Fund; \$1,000.
- Image Analysis System, HPLC, and Liquid Scintillation Counter for the University of South Florida's Department of Marine Science. Co-principal Investigator. National Science Foundation BSR–8507343. August 1985–July 1986; \$57,715.
- Florida Geology for Elementary Teachers. Seed Grant from the University of South Florida Center for Excellence in Mathematics, Science, Computers, and Technology. April—September 1986; \$1,000.
- Marine Micropaleontology Class Cruise, Fall 1986. Chief Scientist. Florida Institute of Oceanography (ship time on R/V Suncoaster). October 1986; \$5,250.
- Shallow Stratigraphy, Structure, and Modern Depositional Processes Along Margins of Small, Detached Carbonate Platforms in an Active Tectonic Setting: Nicaraguan Rise. Co-principal Investigator with A. C. Hine. National Science Foundation, Division of Ocean Sciences. January 1987–June 1989; \$249,593.
- NASA/ASEE Summer Faculty Fellowship, Goddard Space Flight Center, Greenbelt, Maryland. Summer 1987; \$8,000 plus facilities use.
- Deployment of ROV Along Shallow Margins of Carbonate Platforms Situated on the Nicaraguan Rise: S.W. Caribbean Sea. Co-principal Investigator with A. C. Hine. NOAA National Undersea Research Program, equipment and technical assistance grant, May 1988.
- Travel to the 6th International Coral Reef Symposium, Townsville, Australia, August 1988. University of South Florida Faculty Foreign Travel Fund; \$750.

Grants and Contracts (cont.)

- Travel to the Global Sedimentary Geology Program Cretaceous Resources, Events and Rhythms Workshops, Digne, France, September 1988. U. S. National Committee, Global Sedimentary Geology Program; \$1,505.
- Comparisons of optical properties and chlorophyll concentrations with carbonate sediment distributions: west Florida shelf. Principal Investigator. Florida Institute of Oceanography (shiptime on R/V <u>Bellows</u>). April 1989.
- Shallow Stratigraphy, Structure, and Modern Depositional Processes Along Margins of Small, Detached Carbonate Platforms in an Active Tectonic Setting: Nicaraguan Rise. Co-principal Investigator with A. C. Hine. National Science Foundation, Division of Ocean Sciences OCE–8900040. May 1989–April 1992: \$163,126.
- Support for preparation of "Geology of Florida for Teachers" book manuscript. Principal Investigator. USF Center for Excellence in Mathematics, Science, Computers and Technology. 1989; \$2,600.
- Travel to Third International Conference on Paleoceanography, Cambridge, England, September 1989. Department of Earth Sciences, University of Milan, Italy; \$700.
- Carbonate Depositional Environments of the Dry Tortugas and Southwest Florida Shelf. Principal Investigator. Florida Institute of Oceanography (ship time on R/V <u>Suncoaster</u>). November 1990; \$7,200.
- Cytological changes with darkness–induced dormancy in foraminifera with algal symbionts. Principal Investigator. USF Research and Creative Scholarship. April 1991–April 1992; \$7,198.
- Foraminiferal assemblages of selected Key Largo reefs, Florida Keys. Principal Investigator with Barbara Lidz (USGS). NOAA/ National Undersea Research Center UNCW9120. May 1, 1991–April 30, 1992; \$2,880.
- Northern Nicaraguan Rise, Case for: Neogene Segmentation of a Carbonate Megaplatform by Strike–Slip and Related Extension Tectonics and Paleogateway for the Neogene Initiation and Strengthening of the Caribbean Current. Co-principal Investigator with A. C. Hine. National Science Foundation OCE–9212635. January 13, 1992–March 31, 1995; \$133,095.
- Symbiont Loss ("Bleaching") in a Reef–Dwelling Foraminifer. Principal Investigator. National Science Foundation OCE–9203278. February 1, 1992–July 31, 1993; \$48,935.
- Decadal–Scale Changes in Benthic Foraminiferal Assemblages in Reef–Tract Sediments off Key Largo. Principal Investigator with Barbara Lidz (USGS). The Research Consortium. February 1, 1992–July 31, 1993; \$2,000.
- Decadal—Scale Changes in Benthic Foraminiferal Assemblages in Reef—Tract Sediments off Key Largo, Florida. Principal Investigator with Barbara Lidz (USGS). National Oceanic and Atmospheric Administration/National Undersea Research Center UNCW 9221. April 1992—April 1993; \$13,713.
- Bleaching in Benthic Foraminifera: Indicator of Increasing UV Radiation on Coral Reefs. Principal Investigator. NOAA National Undersea Research Center UNCW 9204.4. May 1992–April 1993; \$5,000.
- Acquisition of a Transmission Electron Microscope and Elemental Microanalysis System for the New Marine Science Building. Co-Principal Investigator with J. H. Paul, J. S. Compton, J. B. Rose and R. R. Wilson. National Science Foundation OCE–9214614. September 1992–August 1995; \$150,000.
- Carbonate Depositional Environments of the Dry Tortugas and Southwest Florida Shelf. Principal Investigator. Florida Institute of Oceanography (ship time on R/V Bellows). October 1992; \$7,200.
- UV Induced Bleaching in the Benthic Foraminifer *Amphistegina gibbosa*. Principal Investigator. NOAA National Undersea Research Center UNCW 9322. December 1992–December 1993; \$5,000.
- The Oceanography Camp for Girls. Co-Principal Investigator with P. R. Betzer, P. G. Coble, and T. M. Greeley. National Science Foundation Young Scholars Program ESI–9353012. May 1, 1994–September 30, 1996; \$73,756.
- Evolutionary Implications of Environmental Stress in Adult *Amphistegina*. Principal Investigator. The Geological Society of America, W. Storrs Cole Memorial Research Award. 1994; \$7,000.

- **Grants and Contracts** (cont.)
- Support of the Research Activities of a Marine Engineering Institute at the University of South Florida. Co-Principal Investigator with J. L. Brown, T. L. Hopkins, R. Streeter, and others. Department of Defense/Office of Naval Research; \$2,000,000. P. Hallock Muller Development of a Underwater UV Radiometer; June 1, 1994–May 31, 1996; \$30,961.
- Field Support to Continue Long—Term Sampling of Stressed Benthic Foraminiferal Populations in the Florida Keys. Principal Investigator. National Oceanic and Atmospheric Administration/National Undersea Research Center UNCW 9515. January 1—December 31, 1995; \$5,749.
- Instrumentation for Molecular Analysis of Marine Organisms. Co-Principal Investigator with J. H. Paul, J. B. Rose, and R. R. Wilson. National Science Foundation BIR–9512122. August 15, 1995–July 31, 1997; \$100,390.
- Field Support to Continue Long—Term Sampling of Stressed Benthic Foraminiferal Populations in the Florida Keys. Principal Investigator. National Oceanic and Atmospheric Administration/National Undersea Research Center UNCW 9609. January 1—December 31, 1996; \$5,406.
- Larger Benthic Foraminifera as Indicators of Environmental Change. Principal Investigator. U.S. Department of Interior–Geological Survey, Reston, Virginia, Award No. 1434–94–A–1185. October 1, 1995–September 30, 1996; \$8,000.
- A Study of the Effects of Disposal of Seawater Desalination Discharges on Nearshore Benthic Communities—Phase II. Southwest Florida Water Management District. Co-PI with N. Blake, G. Vargo and others. 2/97–7/98. \$7,500 (to PHM).
- Recruitment Tiles from the Florida Keys. Florida Department of Environmental Protection. March 5–June 30, 1997. \$10,000.
- Field Support to sample stressed foraminiferal populations in the Florida Keys. Principal Investigator. National Oceanic and Atmospheric Administration/National Undersea Research Center UNCW 9703–66. January 1–December 31, 1997, \$3,820.
- Design and Construction of an Underwater Housing for Affordable Monitoring of Solar Radiation to USF Research and Creative Scholarship Grant Programs on 2/15/97; \$7,500; May 1997–April 1998. (PI, Scott Samson of the Center for Ocean Technology, Co-PI).
- "Travel to the 10th International Protozoology Congress, Sydney, Australia" to USF International Travel Grants Program on 2/15/97; \$1,500.
- Geosciences and Society–A Multimedia Approach by Teachers and Scientists; National Science Foundation–Awards to Facilitate Geoscience Education; Pl's Theresa Greely, Peter Betzer, A.C. Hine, P. Hallock Muller, F. Muller–Karger, Sarah Tebbens, J.J. Torres, R.H. Weisberg, amount requested: \$49,718; proposed duration: 9/1/98–8/30/99.
- Foraminifera as Ecosystem Indicators: Phase 1. A Marine Benthic Perturbation Index; Phase 2. Bioassay Protocols. Principal Investigator. U.S. Environmental Protection Agency–ORD–NCERQA GAD#R825869. October 1, 1997–September 30, 2000. \$295,043. \$49,502 supplement and extension to 09/30/02.
- "Foraminifera in lagoon sediments of Glovers Reef Atoll: Have assemblages changed since 1970?" Wildlife Conservation Society, 10/98–4/00; \$6,000.
- "Biological and Geological Characterization of the Tortugas Banks Area, Florida Keys National Marine Sanctuary". Sustainable Seas Expeditions, National Geographic Society, submersible time in September 1999. PI, Co-PI's include A.C. Hine, D. Naar, and D. Mallinson (DMS–USF), W.C. Jaap, J. Wheaton (FMRI–DEP), and G.P. Schmal (FKNMS).
- Bleaching in Reef–Dwelling Foraminifera: Can Stress Symptoms be Induced in Field Experiments? Principal Investigator. National Oceanic and Atmospheric Administration/National Undersea Research Center UNCW 9922. 1/1–12–31/99, \$20,000.
- ROV observations and acoustic/sedimentologic characteristics of outlier reef, slope bedforms, and lowstand ridge deposits; southwest Florida continental margin. A.C. Hine, P. Hallock Muller and B. Jarret, Co-Pl's. National Oceanic and Atmospheric Administration—National Undersea Research Center/University of North Carolina at Wilmington; \$20,000 plus field support; 1/99—06/00.

- **Grants and Contracts** (cont.)
- A Geological Investigation of late Pleistocene Relict Reefs on the South Florida Margin. Florida Institute of Oceanography. Pl with David Mallinson. 5 days ship time on R/V Bellows October 1999 (lost to inclement weather).
- Environmental Marine Biotechnology: Assessing the Health of Coral Reef Ecosystems in the Florida Keys Using an Integrated Molecular Biomarker System. South Carolina Sea Grant Program. PI: Cheryl Woodley and Eric Lacy, Medical University of South Carolina. PH–M is Co-PI with J. Halas, J. Fauth, and C. Downs. Total project \$250,000; subcontract to USF \$41,648; duration: 9/1/00–8/31/02
- Assessment of Foraminiferal Assemblages of Biscayne Bay Sediments. USF component of USGS Project entitled: Pilot Study of the Biogeochemical History of Ecosystems in Biscayne Bay. With USGS Pl's: Barbara Lidz and Eugene Shinn. Duration: 10/01/00–09/30/01. \$22,000
- Participation in Ocean Drilling Program Cruise Leg 194-Marion Plateau. 01/06/01-12/31/02. \$51,609.
- Larger benthic foraminifers of Miocene carbonate platforms of the Marion Plateau (ODP Leg 194: Sites 1193–99): Biostratigraphy and paleoenvironmental interpretation. US Science Support Program/Ocean Drilling Program, Texas A&M University. 06/01–05/03. \$22,990.
- Chemical Pollutants and Toxic Effects on Benthic Foraminifera, Biscayne Bay, Florida, PI B. Lidz. Component of the Cooperative Agreement with the U.S. Geological Survey for Partial Support of Research at the USF/USGS Cooperative Research Center for Coastal Geology. This component: \$20.191. Duration 10/01–09/02.
- Ecosystem Response to Elevated Arsenic Levels. National Science Foundation—CHE–0221834. PI: Thomas Pichler, Co-PI's: James Garey, Gary Huxel and Pamela Hallock Muller. \$1.49 million; Duration: 10/01/02–09/30/06.
- Three New Tools for Reef Monitoring and Risk Assessment: Distinguishing Local from Global Stresses. Florida Keys National Marine Sanctuary's 2003 Special Studies Program. \$52,875; Duration: 10/01/03–06/30/05.
- Biochemistry of Ecosystems in Biscayne Bay, Florida. Pl B. Lidz. Component of the Cooperative Agreement with the U.S. Geological Survey for Partial Support of Research at the USF/USGS Cooperative Research Center for Coastal Geology. Funding period: 10/02–09/03: \$33,302; Funding period 050104–043005: \$30,000.
- Advanced Remote Sensing Methods for Caribbean Coral Reef Studies, Pl J. Brock, . Component of the Cooperative Agreement with the U.S. Geological Survey for Partial Support of Research at the USF/USGS Cooperative Research Center for Coastal Geology. \$34,359; 050104–043005; 35,999; 050105–043006.
- Quantifying Ecological and Economic Impacts of Tropical Cyclones on Coral Reefs and Coastal Water Quality in South Florida. With T. J. Mason (USF–CPH), NOAA/through FIU International Hurricane Center, Year 1: total \$189,875; PHM component: \$135,465; 10/01/04–12/31/05; Year 2: total \$162,645 PHM component: \$149,060); 10/01/05–12/31/07.
- Application of Historic Data Sets and Bioindicators to Assess Status and Ecological Function of Upper Keys Patch Reefs. U.S. EPA Special Studies in the Florida Keys National Marine Sanctuary or Southeast Florida. \$49, 989, 01/01/07–12/31/08.
- Experiments to Determine the Impacts of a High CO₂ World on High Latitude, Temperate and Tropical Benthic Foraminifera. Subcontract to PHM for proposal submitted to NSF–Biological Oceanography by Joan Bernhard, WHOI. 10/1/07–09/30/10; PHM subcontract: \$54,132.
- Pollutants and foraminiferal assemblages in Jobos Bay: An environmental micropaleontology approach. NOAA–National Estuary Program. PI: PHM for M. Martinez. Proposed duration: 06/1/07–05/31/09; 39,732
- Benthic Foraminifera as Bio–indicators of Heavy Metal Pollution: Torrecilla Lagoon (San Juan Bay Estuary), Puerto Rico. Puerto Rico SeaGrant. Pls: M. Martinez–Colon and P. Hallock Muller. Project period: 02/08–01/10; \$97,394.

- **Grants and Contracts** (cont.)
- West Florida Shelf: A Natural Laboratory for the Study of Ocean Acidification. Shiptime proposal to Florida Institute of Oceanography. Four days aboard the R/V Suncoaster representing an award of \$15,200 in shiptime and support services from the State of Florida. 04/01–14/08.
- Florida Shelves: A Natural Laboratory for the Study of Ocean Acidification. Shiptime proposal to Florida Institute of Oceanography. Four days aboard the R/V Bellows representing an award of \$12,400 in shiptime and support services from the State of Florida. 03/08.
- Response of Florida Shelf Sediments to Ocean Chemistry. Component of the Cooperative Agreement with the U.S. Geological Survey for Partial Support of Research at the USF/USGS Cooperative Research Center for Coastal Geology. \$19,000; 050108–043009.
- Distinguishing reef acidification processes: Controls on Conch Reef pH by ambient water column variability versus benthic boundary layer processes. Aquarius Reef Base at the University of North Carolina Wilmington. Lead PIs: Niels Lindquist and Chris Martens; USF subcontract; PHM and B. Byrne, Co-PIs): \$22,499. 05/08–04/10.
- Foraminiferal Assemblages Analysis. U.S. EPA contract, sole PI; \$35, 025; 08/26/08-8/29/10
- Distinguishing reef acidification processes: Controls on Conch Reef pH by ambient water column variability versus benthic boundary layer processes. Aquarius Reef Base at the University of North Carolina Wilmington (flow through from NOAA). Lead PIs: Niels Lindquist and Chris Martens; USF subcontract; PHM and B. Byrne, Co-PIs): \$22,499. Project period: 5/09–4/11: \$22,499.
- Monitoring benthic habitats on the West Florida Slope using benthic foraminifera and sediment geochemistry. Florida Institute of Oceanography: W. Hogarth PI. Subcontract to: B.P. Flower, P. Hallock Muller, David Hollander (USF); L. Collins (FIU), G. Brooks, D. Hastings, Eckerd College. Project Period: 8/13/2010–8/12/2012.
- Toxicity of Deepwater Horizon Oil and Dispersants on Florida's Reef Biota. Florida Institute of Oceanography: Florida Coastal Sentinels, W. Hogarth Pl. Subcontract to: P. Hallock Muller Total: \$173,449. Project Period: 8/13/2010–8/12/2012.
- Harmful Algal Bloom Liason. Florida Fish and Wildlife Conservation Commission. PI: P. Hallock Muller, \$66,599/yr, \$332,995 total; Project Period: 10/4/2010–6/30/2015
- Florida Shelves: A Natural Laboratory for the Study of Carbonate Sedimentation. Shiptime proposal to Florida Institute of Oceanography. Four days aboard the R/V Bellows representing an award of ~\$14,000 in shiptime and support services from the State of Florida. 04/11.
- Julia Galkiewicz–Knaus Fellowship 2012. Florida Sea Grant. PI: P. Hallock Muller; \$49,000 total; Project Period: 02/01/2012–01/31/2013.
- Fixed Price TO for Michael Martinez–Colon to participate in Exp. 340. Consortium for Ocean Leadership. PI: P. Hallock Muller; \$19,783 total; Project Period: 02/03/2012–01/31/2015.
- Fixed Price TO for Elizabeth Brown to participate in Exp. 349. Consortium for Ocean Leadership. PI: P. Hallock Muller; \$18,638 total; Project Period: 01/27/2012–02/15/2016.
- Harmful Algal Bloom Liason. Florida Fish and Wildlife Conservation Commission. PI: P. Hallock Muller, \$86,070 yr 1, \$258,285 total; Project Period: 06/19/2015–6/30/2018
- Subtropical Back–barrier Ecological Responses to Environmental Changes. PI: P. Hallock Muller. \$40,000. Project Period: 08/01/16–07/31/17.

- Muller, P. Hallock. 1975. Sediment production by shallow-water benthic foraminifera at selected sites around Oahu, Hawaii. First International Symposium on Benthonic Foraminifera, Halifax, Nova Scotia.
- Hallock, P. 1979. Carbonate production by selected large, benthic foraminifera on two Pacific coral reefs. Geological Society of America Annual Meeting, San Diego, California. GAAPBC 11:437.
- Hallock, P. 1980. The application of ecologic studies of living, algal symbiont-bearing foraminifera to paleoecologic interpretation. American Association of Petroleum Geologists Annual Meeting, Denver, Colorado. AAPG Bull. 47:716–717.
- Hallock, P. 1980. Distribution of selected species of living benthic foraminifera on two Pacific coral reefs. Geological Society of America Annual Meeting, Atlanta, Georgia. GAAPBC 12:441.
- Röttger, R. and P. Hallock. 1980. Test shape analysis of *Heterostegina depressa* from Hawaii and from laboratory cultures. Cytological and ecological aspects of morphogenesis and structure of Recent and fossil protistan skeletons workshop, Tubingen, Federal Republic of Germany.
- Hallock, P. 1981. An analysis of the energetics of algal symbiosis. Geological Society of America Annual Meeting, Cincinnati, Ohio. GAAPBC 13:466.
- Correa, A. C., G. I. Ballew, K. R. Sundberg, J. A. Drahovzal, P. G. Harrison, H. R. Hopkins, H. R. Lang, S. M. Nicolais, P. Hallock and E. M. Wingo*. 1982. Summary of NASA-GEOSAT oil and gas site, Coyanosa, Texas. American Society of Photogrammetry Annual Meeting.
- Hallock, P. 1982. Evolution and extinction in larger foraminifera. North American Paleontological Convention, Montreal, Canada. Journal of Paleontology 56:(suppl. to No. 2):12.
- Hallock, P. 1982. Nutrient influence of evolution and extinction in carbonate-producing organisms. Geological Society of America Annual Meeting, New Orleans, Louisiana. GAAPBC 14:505.
- Hallock, P. 1983. Larger foraminifera as depth indicators in carbonate depositional environments. American Association of Petroleum Geologists Annual Meeting. AAPG Bull. 67:477–478.
- Hallock, P. 1983. Why are larger foraminifera large? Geological Society of America Annual Meeting, Indianapolis, Indiana. GAAPBC 15:590.
- Cottey*, T. and P. Hallock. 1984. Population studies of *Archaias angulatus* from Largo Sound, Florida. Advances in Reef Science Meeting, Miami, Florida, p. 29.
- Hallock, P. 1984. Embryon size in larger foraminifera: predictions and observations. Geological Society of America Annual Meeting, Reno, Nevada. GAAPBC 16:528.
- Hallock, P. 1984. Foraminifera of Indo-Pacific and Caribbean Reefs: a comparison of selected algal symbiont-bearing taxa. Advances in Reef Science Meeting, Miami, Florida, p. 50–51.
- Hallock, P. 1985. Ecologic and evolutionary implications of large size in foraminifera. VII International Congress of Protozoology, Nairobi, Kenya, June, p. 143. (Hallock, P. 1985. A comparison of algal symbiont-bearing foraminiferal faunas of Indo-Pacific and Caribbean reefs. VII International Congress of Protozoology, Nairobi, Kenya, p. 55.
- Hallock, P. 1985. Drowned reefs and carbonate platforms: reef-community disruption by nutrients provides a clue to the paradox. Geological Society of America Annual Meeting, Orlando, Florida. GAAPBC 17:602.
- Hallock, P. 1986. Musings on functional morphologies in larger foraminifera. Fourth North American Paleontological Congress, Boulder, Colorado, p. A19.
- Hallock, P. 1986. Bioerosion as an indicator of nutrient availability in carbonate depositional environments. Fourth North American Paleontological Congress, Boulder, Colorado, p. A18.
- Hallock, P. 1986. Paleoceanographic nutrients and the evolution of larger reef foraminifera. Second International Conference on Paleoceanography, Woods Hole, Massachusetts, <u>Abstracts</u> with program, p. 39.
- Hallock, P. 1986. Notes on coiling direction in trochospiral foraminifera, Benthos '86–An International Symposium on Benthic Foraminifera, Geneva, Switzerland, p. 42.
- Hallock, P. 1986. Diversification in algal symbiont-bearing foraminifera: Response to oligotrophy? Benthos '86–An International Symposium on Benthic Foraminifera, Geneva, Switzerland, p. 41–42.
- Hallock, P. and <u>S. W. Snyder</u>. 1986. Nutrient control of biogenic sedimentation in low-latitude, shallow-water environments. SEPM Annual Mid-year Meeting, Raleigh, North Carolina, Abstracts v. III, p. 49.

- 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.
- <u>Peebles*, M. W.</u>, P. Hallock and A. C. Hine. 1989. Sedimentology and taphonomy of Thunder and Lightning Knolls, two small carbonate platforms, Nicaraguan Rise, southwest Caribbean Sea. Geological Society of America Annual Meeting, St. Louis, Missouri. GAAPBC 21: A293.
- Smith*, K., and P. Hallock. 1989. Dormancy in benthic foraminifera: Possibilities and implications. Geological Society of America Annual Meeting, St. Louis, Missouri. GAAPBC 21:A46.
- Hallock, P. 1990. Nutrient flux as a regulating mechanism for reef development: Modern and Cretaceous models. SEPM Research Conference on Cretaceous Models. SEPM Research Conference on Cretaceous Resources, Events and Rhythms, Denver, Colorado. Program and Abstracts.
- Hallock, P., and A. C. Hine. 1990. Sponge-algal bioherms on the western platforms of the Nicaraguan Rise, Southwestern Caribbean. American Association of Petroleum Geologists Annual Convention, San Francisco. AAPG Bulletin 74(5):668.

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- <u>Beccari</u>, V., S. Stainbank, P. Hallock, D. Basso, M. Fau, and S. Spezzaferri. 2019. Assessing coral reef health in North Ari Atoll (Maldives Archipelago) using different indices: Amphistegina Bleaching, FORAM and SEDCON Indices. IAS International meeting of Sedimentology, Università di Roma La Sapienza.
- Hallock, P. 2019. What exactly are larger benthic foraminifera? Why definitions matter. Geological Society of America, Annual Meeting, Phoenix, September 2019.
- Hallock, P. 2019. To recruit a diversity of graduate students, use a diversity of critera. Geological Society of America, Annual Meeting, Phoenix, September 2019.

Meeting Abstracts (cont.)
Hallock, P. 2020. Wide-ranging Implications from Studies of Foraminiferal Biology. Geological Society of America, Annual Meeting, online, October 2020.

Invited Lectures

January 1978	Carbonate production on coral reefs by benthic foraminifera. Department of
January 1978	Geology, Hebrew University of Jerusalem, Israel. Trends in test shape in symbiont-bearing foraminifera. Department of
•	Oceanography, Hebrew University of Jerusalem, Israel.
March 1978	Sediment production on coral reefs by benthic foraminifera. Institute of Historical Geology and Paleontology, University of Copenhagen, Denmark.
August 1982	Evolution and extinction in larger foraminifera. Symposium on Paleobiology of Foraminifera, North American Paleontological Convention, Montreal, Canada.
October 1982	Evolution and extinction in carbonate-producing organisms. San Angelo Geological
Manala 1000	Society, San Angelo, Texas.
March 1983	Evolution and extinction in carbonate-producing organisms. Permian Basin Section-Society of Economic Paleontologists and Mineralogists, Midland, Texas.
April 1983	Algal symbiosis: Implications for micropaleontology. Society of Economic Paleontologists and Mineralogists-Marine Micropaleontology Research Group,
1005	AAPG-SEPM Annual Meeting, Dallas, Texas.
January 1985	Why are larger forams large? Geology Department Colloquium, University of South Florida, Tampa.
June 1985	Ecologic and evolutionary implications of large size in foraminifera. VII
	International Congress of Protozoology, Nairobi, Kenya.
February 1986	How nutrients kill coral reefs. Department of Geology Seminar, University of South Carolina, Columbia.
February 1986	How nutrients kill coral reefs. Department of Geology-Curriculum in Marine
	Science Joint Seminar, University of North Carolina, Chapel Hill.
August 1986	Bioerosion as an indicator of nutrient availability in carbonate depositional
August 1888	environments. Fourth North American Paleontological Convention, Symposium on
	ecological and evolutionary implications of taphonomic processes, Boulder, CO.
August 1986	Musings on functional morphologies in larger foraminifera. Fourth North American
August 1900	Paleontological Convention, Symposium on functional morphology in foraminifera,
	Boulder, Colorado.
Santambar 1006	
September 1986	Notes on coiling direction in trochospiral foraminifera. Plenary session on
	quantitative methods, Benthos '86, An International Symposium on Benthic
0	Foraminifera, Geneva, Switzerland.
September 1986	Diversification in algal symbiont-bearing foraminifera: a response to oligotrophy?
	Plenary session on understanding benthic environments and the application to
	exploration for mineral resources, Benthos '86, An International Symposium on
	Benthic Foraminifera, Geneva, Switzerland.
September 1986	Paleoceanographic nutrients and the evolution of larger reef foraminifera. Second
	International Conference on Paleoceanography, Symposium on evolution and the
	marine record, Woods Hole, Massachusetts.
September 1986	Nutrient control of biogenic sedimentation in low-latitude, shallow-water
	environments. SEPM Mid-Year Meeting, Symposium on reefs in time and space
	revisited, Raleigh, North Carolina (with S. W. Snyder, presented by S. W. Snyder).
July 1987	Presented two short communications to the Working Group on Evolution and
	Extinction of Oceanic Biota at COSOD II (meeting on the future of Scientific Ocean
	Drilling) in Strasbourg, France (participation by invitation).
July 1987	How nutrients kill coral reefs. Laboratory for Oceans, NASA Goddard Space Flight
	Center, Greenbelt, Maryland.
July 1987	Chlorophyll Fluctuations in Oceanic Waters in the Vicinity of the Nicaraguan Rise:
	Summary of Activities under 1987 NASA/ASEE Summer Faculty Fellowship
	Program, NASA Goddard Space Flight Center, Greenbelt, Maryland.
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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. March 1989 Platforms of the Nicaraguan Rise: Examples of the sensitivity of carbonate sedimentation to excess nutrients. University of South Florida, Department of Geology Colloquium. March 1989 How nutrients kill coral reefs. University of Tennessee, Department of Geological Sciences Colloquium. How nutrients kill coral reefs. University of Florida, Department of Geology **April 1989** Colloquium. Coral reefs. St. Petersburg Historical Society, St. Petersburg, Florida. August 1989 Correlation between carbonate-platform benthos and planktonic foraminiferal September 1989 evolution through Paleogene paleoceanographic changes. 3rd International Conference on Paleoceanography (ICP III), Cambridge, England. Nutrification Impact on Fishery Habitats. Gulf Coast Fishery Management Council, November 1989 Florida/Alabama Habitat Protection Advisory Panel, Tampa, Florida. Nutrient excess and the demise of coral reefs and carbonate platforms. University January 1990 of Texas at Dallas, Geosciences Colloquium. How nutrients kill coral reefs. Florida State University, Oceanography Colloquium. October 1990 October 1991 Bimodality in coral and algal carbonate production: An example from the Nicaraguan Rise, western Caribbean. UNOCAL, Brea, California. November 1991 Coral reefs and environmental change: A global perspective. Wesleyan University, Middletown, Connecticut. Coral reefs: Delicate Balance, Precarious Prospects. Design Center of the February 1992 Americas: Americus Conference, Dania, Florida. **April 1992** Trophic Resources and Evolution: Examples from Foraminifera. University of Chicago, Chicago, Illinois. **April 1992** Bimodality in Coral and Algal Carbonate Production: An Example from the Nicaraguan Rise. University of Chicago, Chicago, Illinois. **April 1992** Bimodality in Coral and Algal Carbonate Production: Space for Rudists? University of Wisconsin, Madison, Wisconsin. Bleaching in a Reef-Dwelling Foraminifer, Amphistegina gibbosa. University of July 1992 Hawaii, Honolulu, Hawaii. August 1992 Bimodality in Coral/Algal Carbonate Platforms: Ecospace for Rudists? Global Sedimentary Geology Program (GSGP) Cretaceous Resources, Events, and Rhythms (CRER) Global Geology of Cretaceous Reefs and Carbonate Platforms Working Group 4, Tremp, Spain. Short Course on the Influence of Nutrients on Benthic Communities and the Effects December 1992 on Carbonate Production: Lecture 1: Nutrients and Modern Reefs Lecture 2: Nutrients and Carbonate Sedimentation Lecture 3: Nutrients, Paleoceanography and Evolution Catalan Institute of Natural History, Barcelona, Spain August 1993 Ocean mixing, paleoproductivity, and biomineralization: How useful are icehouse-world models for greenhouse-world questions? Invited Plenary Address for Paleogroductivity and Ocean Mixing, SEPM Theme Meeting, August 8-12, 1993, Pennyslvania State University, University Park. January 1995 Amphistegina Densities as a Practical, Reliable, Low-Cost Indicator of Coral Reef

St. Petersburg, Florida

June 1995

and Habitat Conditions of Coral Reefs. Annapolis, Maryland.

Vitality. USEPA/NOAA Sponsored Symposium on Methods for Assessing the Biota

Florida's Coral Reefs: Do They Have a Future?, University of South Florida,

Invited Lectures (cont). September 1996 Bleaching in Reef-Dwelling Foraminifera. Department of Geology and Geophysics 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. January 1999 Senior Women in Academia: What are Mentors and Role Models Worth? 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. Global Change: Implications for Florida's Reefs. Departments of Biology and January 2000 Geology, Kansas State University, Manhattan, Kansas. Seminar: "Global Change: Implications for Florida's Reefs" and 1-day Workshop: January 2000 "Larger Foraminifera as Tools for Paleoenvironmental Interpretation", Department of Geology, Wichita State University, Wichita, Kansas, sponsored by the WSU

the Association for Women Geoscientists).

Geology Club/AAPG Student Chapter/Sigma Gamma Epsilon (with funding from

Invited Lectures (cont). "The 1998 Class Action Gender Discrimination Case Against the University of March 2000 South Florida: The Data and the Outcome" To: The Florida International University Chapter of the United Faculty of Florida, Miami, Florida. March 2000 "Larger Foraminifera as Indicators of Reef Vitality". Department of Geology 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 June 2000 Symposium on the Geology of the Bahamas, San Salvador, Bahamas. Foraminifera as Bioindicators in Coral Reef Ecosystems: The FoRAM Protocol. August 2000 Keynote Speaker at AMEP-2000, Application of Micro and Meioorganisms to Environmental Problems, Winnipeg, Manitoba, Canada, August 28–31, 2000. "Coral Reefs in the 21st Century: Is the past the Key to the Future?" Department of October 2000 Geology, Kent State University, Ohio. "Senior Women in Academia: What are Mentors and Role Models Worth?" Kent October 2000 State University, Ohio. "Global Change: Implications for Florida's Coral Reefs". Marine Sciences Day. Phi November 2000 Theta Kappa International Honor Society, St. Petersburg Junior College-Clearwater Campus. "Coral Reefs are Dying Worldwide. Local, regional and global threats to reefs", **April 2001** Earth Day, Williams Park, St. Petersburg, Florida. "Senior Women in the Sciences: What are Mentors and Role Models Worth?" May 2001 Professional Seminar, Department of Geology, University of Massachusetts at "Symbiont-Bearing Foraminifera: Harbingers of Global Change?", Organismic and May 2001 Evolutionary Biology Seminar, University of Massachusetts at Amherst. May 2001 "Adventures of "our own" AWG Marine Scientist On-board the Joides Resolution", South Florida Chapter, Association for Women in Science. April 2001 Foraminifers as Bioindicators in Coral Reef Ecosystems. USEPA-NCER Science Seminar Series, Washington, DC. September 2002 Micro-and Meiobiota in Environmental Monitoring and Risk Assessment of Coral Reefs: Developing Tools for the Toolbox. Plenary Address, EMMM'2002, The Third International Congress " Environmental Micropaleontology, Microbiology and Meiobenthology", Vienna, Austria. Hallock, P. 2002. Foraminifers as Bioindicators in Coral Reef Ecosystems. October 2002 Geological Society of America Annual Meeting, Denver, CO. "Coral Reefs in the 21st Century: Is the past the Key to the Future?" Hosted by March 2003 Marine Science Program, University of California at Santa Barbara. "Senior Women in Academia: What are Mentors and Role Models Worth?" WISE, March 2003 University of California at Santa Barbara. Invited Lecture: From Satellites to Molecules: A Multi-scale Approach to April 2003 Environmental Monitoring and Risk Assessment of Coral Reefs. KUDOS series, Science Journalism Center, University of South Florida-St. Petersburg. "Environmental Monitoring and Risk Assessment of Coral Reefs: A Multi-Scale September 2003 Approach". Department of Environmental Studies Colloquium, Emory University, Atlanta, GA. "Senior Women in Academia: What are Mentors and Role Models Worth?", Emory September 2003 University, Atlanta, GA. September 2003 Invited Panelist, Where are the Women Geoscientist Full Professors" Workshop sponsored by NSF-Advance Program and AWG Foundation, Washington, DC.

October 2003

Invited Panelist: Women in the Workplace Series: Women in Academia. Campus

Women's Collective, University of South Florida, St. Petersburg, FL.

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.

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

> 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 Goldilocks and the Three Biogenic Carbonate Minerals: What Determines "Just

Right"? Department of Earth Sciences, Florida International University, Miami.

Coral Reefs in the 21st Century: Is the Past the Key to the Future? AWG April 2009

Distinguished Lecture for UNCW Women in Science and Engineering, University

of North Carolina at Wilmington.

Senior Women in Academia: What are Mentors and Role Models Worth? AWG April 2009

Distinguished Lecture for UNCW Women in Science and Engineering, University

of North Carolina at Wilmington.

June 2009 Careers in Marine Science-A Lot More than Manatees and Dolphins. 2009 USF

Girls STEM Summit, University of South Florida, Sarasota Campus.

October 2009 Goldilocks and the Three Carbonate Minerals: What Determines "Just Right."

Sperry Family–Five Colleges speaker for 2009, Williams College, Massachusetts.

October 2009 Coral Reefs in the 21st Century: Is the Past the Key to the Future? Sperry Family-

Five Colleges speaker for 2009, Williams College, Massachusetts.

November 2009 Coral Reefs in the 21st Century: Is the Past the Key to the Future? Eckerd College

Sigma Xi Chapter Speaker.

February 2010 Coral Reefs in the 21st Century: Is the Past the Key to the Future? Hillsborough

Community College Lecture Series.

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). Goldilocks and the Three Biogenic Carbonate Minerals: What Determines "Just April 2010 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. Coral Reefs in the 21st Century: Is the Past the Key to the Future? Aquatic Animal October 2010 Health Program, University of Florida, Gainesville. Coral Reefs in the 21st Century: Is the Past the Key to the Future? Pasco County January 2011 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-St Petersburg, Spring Seminar Series. Modern coral reefs under global change: New opportunities to understand October 2011 carbonate depositional hiatuses The Paleontological Society Shortcourse: Corals and Reefs: Crises, Collapse and Change, Minneapolis, MN, Oct. 8, 2011. October 2011 Coral reefs in the Anthropocene: What paradoxes can we learn from today? College of Marine Science Seminar, University of South Florida, St. Petersburg. November 2011 Coral Reefs and Climate Change: Goldilocks or Canaries? Association of Senior Professional as Eckerd College, St. Petersburg, FL November 2011 Influence of a Shallow-Water Hydrothermal Vent System at Ambitle Island, Papua New Guinea, on Tropical Foraminiferal Assemblages. Leibniz Center for Tropical Marine Ecology (ZMT), Bremen, Germany. Global Change in the 21st Century: Do Coral Reefs Have a Future? Satly Topics December 2011 Seminar Series, Weedon Island Preserve, St. Petersburg, FL., Global Change in the 21st Century: Do Coral Reefs Have a Future? Indian Rocks January 2012 Beach Neighborhood Association Boat Club, Indian Rocks Beach, FL. April 2012 Global Change in the 21st Century: Do Coral Reefs Have a Future? University of California, Merced, California, May 2012 21st Century Coastal Environments: Do Coral Reefs Have a Future? Coastal Cities Summit, St. Petersburg, Florida. October 2012 Bleaching in reef-dwelling foraminifers: implications for reef decline. Women in Science Lecture, Leibniz Center for Tropical Marine Ecology (ZMT), Bremen, Germany. October 2012 Bleaching in reef-dwelling foraminifers: implications for reef decline. Alfred Wegener Institute for Polar and Marine Studies (AWI), Bremerhaven, Germany. Hallock, P. 2012. The FORAM Index revisited: Usefulness, challenges and October 2012 limitations. USF-St Petersburg Environmental Science Seminar Series. November 2012 The FoRAM Index: A single-metric indicator of coastal and reef water quality. Invited talk for The Role of Microfossils in Environmental Monitoring, Geological Society of America Annual Meeting, Charlotte, NC, Strategies for energy capture indicate environments of carbonate production. November 2012 Invited talk for Heterozoan Carbonates in Time and Space, Geological Society of America Annual Meeting, Charlotte, NC, November 2012. The FoRAM Index: A single-metric indicator of coastal and reef water quality. October 2013 Alfred Wegener Institute for Polar and Marine Studies (AWI), Bremerhaven. October 2013 Anthropocene stress in reef-dwelling Foraminifera: Taphonomic evidence. Geological Society of America Annual Meeting, Denver, CO.

Invited Lectures (cont).

April 2014 Modern Coral Reefs Under Global Change: Lessons from Goldilocks. AWG

Distinguished Lecture, Colby College, Maine.

March 2016 Two lectures: Cenozoic Trends in Shallow–Water Carbonate Production: Insights

from Chemistry, Climate and Biology, and Women in the Geosciences: The Amazing Power of One. Association of Women Geoscientists Distinguished

Lectures presented at University of Texas at Austin.

April 2016 Cenozoic Trends in Shallow–Water Carbonate Production: Insights from

Chemistry, Climate and Biology. Seminar for Louisiana State University College of

the Coast and Environment.

September 2017 Modern Coral Reefs Under Global Change: Opportunities to Understand

Paradoxes in the Carbonate Record. University of Lausanne, Switzerland.

September 2017 Forams as Bioindicators in Warm–Water Coastal Environments, Bridging gaps

and generations in foraminiferal biomonitoring: toward a new COST action on pollution monitoring (FORAM–COST). Fribourg, Switzerland, September 2017.

Workshops Organized

Co-organized, with Dr. John Lee of City University of New York, a Workshop on Foraminiferal Biology held at Lizard Island Research Station, Australia, on July 27–30, in conjunction with the 10th International Congress of Protozoology, which was held in Sydney 21–25 July 1997.

Co-organizer, with Dr. Robert G. Loucks of ARCO Petroleum Company, Prof. Richard Moody of Kingston University, UK, and Dr. Mark Sonnenfeld of Elf Aquitaine Production Company, of an international Conference/Workshop entitled "Tertiary to Recent Larger Foraminifera: Their Depositional Environments and Importance as Petroleum Reservoirs", which was held in mid–February 1998, in Kingston, England.

Sessions Chaired at Professional Meetings

- Co-chair Sedimentology III: carbonates, evaporites, cherts. 1979 Annual Meeting, Geological Society of America, San Diego, CA.
- Co-chair Paleontology III. 1980 Annual Meeting, Geological Society of America, Atlanta, GA.
- Co-chair Paleontology I. Phylogeny and Evolution. 1982 Annual Meeting, Geological Society of America, New Orleans, LA.
- Co-chair Micropaleontology. 1983 Annual Meeting, Geological Society of America, Indianapolis, IN.
- Co-chair Cushman Symposium on functional morphology in foraminifera. Fourth North American Paleontological Congress, Boulder, CO, August 1986.
- Co-chair Paleontological Society Session on Evolution: Radiation and Extinction. 1989 Annual Meeting, Geological Society of America, St. Louis, MO.
- Co-chair Carbonate Platforms session, Society of Economic Paleontologists and Mineralogists Research Conference on Cretaceous Resources, Events, and Rhythms (CRER), Denver, CO, Aug. 1990.
- Chair Scientific session of American Academy of Underwater Sciences Tenth Annual Scientific Diving Symposium, St. Petersburg, FL, Oct. 1990.
- Co-chair Sedimentology I. Carbonate Sedimentology: Modern and Ancient. 1990 Annual Meeting, Geological Society of America, Dallas, TX.
- Co-chair Global Environmental Changes and Reef Responses. 7th International Coral Reef Symposium, Guam, June 1992.
- Convener Age, Stage and Gender in the Scientific Community, panel for conference on The Politics and Processes of Scholarly Publishing, University of South Florida, St. Petersburg, FL, March 1994.
- Co-chair Micropaleontology Session. 1995 Annual Meeting, Geological Society of America, New Orleans, LA, October 1995
- Co-chair Biology of Foraminifera, 10th International Congress of Protozoologists, Sydney, Australia, July 1997
- Co-chair Micropaleontology.1996 Annual Meeting, Geological Society of America, Denver, CO, Oct.1996
- Co-chair Larger Foraminifera as Environmental Indicators. Forams '98, Monterrey, Mexico, July 1998
- Co-chair Pollution: Micro–and Meioorganisms in Background Assessment, Impact, Environmental Monitoring and Recovery. Second International Conference "Application of Micro–and Meioorganisms to Environmental Problems", Winnipeg, Manitoba, Canada, August 2000.
- Co-chair Beach Development and Biogenic Framework. Carbonate Beaches 2000, Key Largo, Florida, December 2000.
- Co-chair Micropaleontological Solutions to Urban Problems, Geological Society of America, Denver, Colorado, October 2002.
- Co-chair "Protists in Extreme Environments: Fossil Evidence to Physiological Adaptations"; Cushman Foundation/ Paleontological Society Theme Session, Geological Society of America, Oct. 2005.
- Co-convenor: Ontogenetic, Taphonomic and diagenetic shell features: What stories can they tell? Forams 2010–International Symposium on Foraminifera, September 5–10, 2010, Bonn, Germany.
- Co-convenor (with my Graduate student Michael Martinez-Colon): Ontogenetic, taphonomic and diagenetic shell features: What stories can they tell? Forams 2010, Bonn, Germany, Sept. 2010.
- Co-convenor: Coral Reefs in a Crystal Ball: What Will Be Their Future? ASLO-San Juan, February 2011.
- Co-convenor: Frontiers in Foraminiferal Research: Implications for Interpreting the Past, Understanding the Present, and Predicting the Future. Geological Society of America Annual Meeting, Minneapolis, MN, October 2011.
- Co-convenor: Benthic foraminfera as indicators and model organisms for environmental changes on coral reefs: local, regional and global. 12th International Coral Reef Symposium, Cairns, Australia, July 2012.
- Co-convenor: Advances in Environmental Micropaleontology, Forams 2014–International Symposium on Foraminifera, Concepcion, Chile, January 2014.
- Co-convenor: The Microfossil Record: The Past is the Key to the Future (or Present) in Conservation Paleobiology. NAPC 2014–North American Paleontological Congress, Gainesville, Florida, USA. February 2014.
- Lead convenor: Indicator taxa: What can they tell us about the past, present and future for coral reefs? International Coral Reef Symposium, Honolulu, June 2016.
- Lead convenor: Session V: Foraminiferal Research Schools: The Past Can Inform the Future: FORAMS 2018, International Symposium on Foraminifera, Edinburg, Scotland, June 2018.

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.
- World Resources Institute, International Centre for Living Aquatic Marine Resources, and World Conservation Monitoring Centre: Reefs at Risk Workshop; Manila, Philippines; Sept. 24–25, 1997.
- U.S. Environmental Protection Agency: 1996/97 STAR Grants Ecological Assessment/ Ecosystem Indicators Program Review; Las Vegas, Nevada, February 3–5, 1998.
- Florida Department of Environmental Protection: Developing a Statewide Biological Assessment Approach for Florida's Marine and Estuarine Ecosystems; St. Petersburg, FL; Apr. 28–29, 1998.
- Invited Participant: Workshop on Developing a Statewide Biological Assessment Approach for Florida's Coral–Reef and Hardbottom Ecosystems; Sponsored by the Florida Department of Environmental Protection, St., Petersburg, FL., October 13–14, 1998; March 30–31, 1999.
- Gulf of Mexico Fishery Management Council: Special Coral Scientific and Statistical Committee (Appointed Member–1999–02)
- Invited Panelist: Gender Equity Workshop, Geological Society of America Committee on Minorities and Women in the Geosciences, National Association of Black Geologists and Geophysicists, and Mills College Women's Leadership Institute; Geological Society of America Meeting, Reno, NV, 11/12/00.
- Invited Participant: National Center for Caribbean Reef Research sponsored Workshop on the Future of Caribbean Reefs, 09/26–28/01
- Technical Workshop on Coral, Coral Reefs and Live/Hard Bottom Habitat and Artificial Reefs, South Atlantic Fishery Management Council, March 26–27, 2003, in St. Petersburg, Florida.
- Invited Participant: Coral Reefs, Climate and Coral Bleaching Workshop, Coral Reef Task Force, June 18–20, 2003, in Kahuku (Oahu), Hawaii.
- Invited Panelist: Where are the Women Geoscience Professors? Workshop sponsored by the Association for Women Geoscientists, the University of Nebraska and the National Science Foundation, September 26–27, 2003; in Washington, D.C.
- Presented "Reef Risk Assessment: Satellites to Molecules". South Carolina Sea Grant Consortium, Environmental Marine Biotechnology Program: Assessing the Health of Coral Reef Ecosystems in the Florida Keys Using an Integrated Molecular Biomarker System. Constituents Workshop, Key Largo, FL, January 17–18, 2004.
- Healthy Mesoamerican Reef Workshop, Invited participant and speaker, Miami, Florida, 06/02–04/04. Satellites to Molecules: Strategies and Tools for Reef Monitoring & Risk Assessment. Florida Hurricane Alliance Workshop, March 1, 2005.
- Chaired Session 2A and presented session summary: Ecosystem Responses to Elevated CO₂–Neritic Ecosystem Response. Impacts of Increasing Atmospheric CO₂ on Coral Reefs and Other Marine Calcifiers. Sponsors: NOAA/NSF/USGS. St. Petersburg, Florida April 18–20, 2005.

- <u>Invited Workshop or Committee Participation</u> (cont.)
- Satellites to Molecules: Strategies and Tools for Reef Monitoring & Risk Assessment. Shortcourse on Environmental Micropaleontology–Monitoring past and present environmental perturbations using micro–organisms, Conference Universitaire de la Suisse Occidentale (CUSO), Fribourg, Switzerland, July 5, 2005.
- Causes and Consequences of Bleaching in the Reef–Dwelling Foraminifera, *Amphistegina* spp. Workshop on unicellular symbionts, University of Vienna, Austria, December 12, 2005.
- 14th International Conference on Environmental Bioindicators, Maritime Institute, Linthicum, Maryland, April 24–26, 2006
- NSF Workshop: Community Sedimentary Model for Carbonate Systems, Colorado School of Mines, Golden, CO, February 27–29, 2008.
- NSF Workshop: Broadening the Spectrum: A Community Workshop to Expand Opportunities for Underrepresented Minorities in the Marine and Environmental Sciences in South Florida. Indian River State College, Fort Pierce, FL, USA, February 2013.
- Scientific Committee Member, Forams 2014–International Symposium on Foraminifera, Concepcion, Chile, January 2014.
- Bridging gaps and generations in foraminiferal biomonitoring: toward a new COST action on pollution monitoring (FORAM–COST). Fribourg, Switzerland, September 2017.
- Scientific Committee Member, Forams 2018–International Symposium on Foraminifera, Edinburgh, Scotland, June 2018.
- Invited Instructor, Short course on Foraminfera and Scientific Writing, Nanjing University, Nanjing, China, September 2019
- Member of the Scientific Committee of the 3rd Conference of the Arabian Journal of Geosciences (CAJG), held online, on 2–5 November 2020.

Consulting Activities

- For Hawaiian Electric Company, Inc., Honolulu, Hawaii: Consultant on the effects of thermal effluent on benthic foraminifera and nearshore carbonate sedimentation (1975–1977)
- For Cities Service Research Center, Tulsa, Oklahoma: Consultant on paleoenvironmental analysis to Tertiary carbonate cores (1981)
- For Prentice—Hall, Englewood Cliffs, NJ: Reviewed manuscript for <u>Dynamic Stratigraphy</u>, 2nd Edition, by R. K. Matthews (1982)
- For William T. Probandt, Exploration Geologist: Consultant on reef models for hydrocarbon exploration (1983)
- For Southwest Teacher Education Center, Fort Myers, Florida, and Sarasota County School Board, Osprey, Florida: Consultant in Earth Science Education (June–July 1984)
- For Continental Shelf Associates, Jupiter, Florida: Consultant on coral reefs of the Florida Keys (1988–89) For W. H. Freeman, New York: Reviewed manuscript for <u>Palaces under the Sea</u>: <u>The Coral Reefs</u>, by J. Strykowski and R. Bonem (1991)
- For Texas A&M University Press: Reviewed manuscript for <u>Ecologic Atlas of Benthic Foraminifera of the Gulf of Mexico</u> by C.W. Poag (2014)
- For R&RSolutions, Arlington, VA, provided technical recommendations (2019)