

**CURRICULUM VITAE**  
**ANDRÉA GENEVIÈVE GROTTOLI**

**ADDRESS AND CONTACT INFORMATION**

School of Earth Sciences (SES)  
The Ohio State University  
125 South Oval Mall  
Columbus, OH 43210

Email: grottoli.1@osu.edu  
Tel: 614-292-5782  
Website: <http://u.osu.edu/grottoli.1/>  
LinkedIn: <https://www.linkedin.com/in/andrea-grottoli/>

**RESEARCH INTERESTS**

- Impact of climate change (i.e., temperature and ocean acidification) on coral physiology, ecology, isotope biogeochemistry, and resilience
- Technology and restoration interventions for protecting coral reefs
- Tropical paleoceanography derived from coral, gorgonian, and sclerosponge skeleton light isotope ratio ( $\delta^{13}\text{C}$ ,  $\delta^{18}\text{O}$ ,  $\Delta^{14}\text{C}$ ) and elemental ratio (Cd/Ca, Ba/Ca, P/Ca, Sr/Ca) proxy records
- Impact of land use change on carbon cycle of rivers and coastal waters using  $\delta^{13}\text{C}$ ,  $\Delta^{14}\text{C}$ , and trace elements

**EDUCATION**

McGill University, Montreal Canada	Biology (with Distinction)	BSc. 1992
University of Houston, Texas	Biology (Marine Biogeochemistry)	PhD. 1998
University of California – Irvine, California	Postdoctoral Fellow (Paleoceanography)	1999-2000

Senior Thesis Advisor:	Prof. Robert Peters (deceased), McGill University
PhD Advisor:	Prof. Gerard M. Wellington (deceased), U. of Houston
Postdoctoral Advisor:	Prof. Ellen R.M. Druffel, U. of California – Irvine

**POSITIONS HELD**

2023-	Office of Academic Affairs Faculty Fellow, Ohio State University
2021 -	Arts and Sciences Distinguished Professor of Earth Sciences, Ohio State University
2019 -	Director of the Coral Bleaching Research Coordination Network
2008 -	Affiliated Professor, Dept of Evolution, Ecology, and Organismal Biol., Ohio State U.
2017 - 2023	Chair, Promotion and Tenure Committee, School of Earth Sciences
2019 - 2022	President of the International Coral Reef Society (coralreefs.org)
2021 - 2022	Fulbright Fellow and visiting researcher Laboratoire Océanographique de Villefranche
2021 - 2022	Visiting Researcher, Centre Scientifique de Monaco, Monaco
2014 - 2021	Professor, School of Earth Sciences, Ohio State University
2013 - 2017	International Society for Reef Studies Council Member, Chair of Awards Committee
2005 - 2017	Head of the Stable Isotope Biogeochemistry Lab, School of Earth Sciences, OSU
2015 - 2016	OSU-President and Provost's Leadership Institute Fellow (PPLI)
2010 - 2016	Chair of the Water, Climate, & the Environment Division, School of Earth Sciences, OSU
2013 - 2014	Big10-Committee on Institutional Cooperation Academic Leadership Program Fellow
2013	Visiting Researcher, Centre Scientifique de Monaco, Monaco
2008 - 2014	Associate Professor, School of Earth Sciences, Ohio State University
2008 - 2011	Associate Professor, Environmental Science Graduate Program, Ohio State U.

2005 - 2008 Assistant Professor, Environmental Science Graduate Program, Ohio State U.  
 2005 - 2008 Assistant Professor, School of Earth Sciences, Ohio State University  
 2004, 2012, 2016 Associate Editor for my session, Proceedings of the Int'l Coral Reef Symposium  
 2004 - 2005 Career Enhancement Fellow, Woodrow Wilson National Fellowship Foundation  
 2001 - 2005 Assistant Professor, Dept of Earth & Environmental Sci., University of Pennsylvania  
 2001 - 2005 Faculty Fellow in Residence, Fisher-Hassenfeld House, University of Pennsylvania  
 2001 - 2003 Associate Editor, Coral Reefs (Journal of the International Coral Reef Society)  
 2002 - 2003 Co-Editor, Coral Reefs Special Issue: Env. and Climatic Proxies in Reef Organisms  
 1999 - 2000 Dreyfus Postdoctoral Fellow in Environmental Chemistry, Univ. California-Irvine  
 1998 Adjunct Faculty, Dept of Biology and Microbiology, California State U.-LA  
 1998 Adjunct Faculty, Dept of Biology, Concordia University  
 1993 - 1998 Graduate Student Teaching Assistant/ Research Assistant

## AWARDS

2021 AGU Division of Ocean Sciences Rachel Carson Lecturer  
 2021 Arts and Sciences Distinguished Professor of Earth Sciences, Ohio State University  
 2020-2021 Fulbright Fellow (Franco-American Commission for Educational Exchange)  
 (effective 2021-22 due to pandemic delays)  
 2018 American Geophysical Union, Division of Ocean Sciences, Voyager Award (Mid-Career)  
 2017 American Association for the Advancement of Science (AAAS) Fellow  
 2016 International Society for Reef Studies Fellow  
 2016 International Society for Reef Studies Mid-Career Award  
 2016 School of Earth Science Faculty Mentor Award  
 2015-2016 Ohio State University President and Provost's Leadership Institute Fellow  
 2013-2014 Committee on Institutional Cooperation Academic Leadership Program Fellow  
 2004 F. W. Clarke Award, Geochemical Society, Young Scientist Award in geochemistry  
 2004 Bradley Award: Geological Society of Washington's Best Paper Award  
 2004 Woodrow Wilson National Fellowship, Career Enhancement Fellowship for Junior Faculty  
 2004 Trustees Council of Penn Women Summer Faculty Research Fellowship  
 2003 American Society of Mass Spectrometry Research Award  
 2000 Best Paper Award: International Society for Reef Studies, Grottoli & Wellington: Coral Reefs  
 1999 Dissertation Symposium in Chemical Oceanography XV, awardee and participant  
 1999-2000 Dreyfus Postdoctoral Fellowship in Environmental Chemistry, U. of California - Irvine  
 1999 University Women Postdoctoral Research Leave Fellowship, AAUW (declined for Dreyfus)  
 1996-1998 Environmental Protection Agency Graduate STAR Graduate Fellowship  
 1998 Graduate Student Research Excellence Award, University of Houston, TX  
 1989 McConnell Entrance Award, McGill University, Canada

## PUBLICATION STATS SUMMARY

Google Citation indices	All	Since 2019	Other Metrics	Career Total
Citations	8458	4247	Peer-reviewed publications	93
h-index	47	36	Total funding (total to Grottoli)	\$36.4M(\$3.8M)
i10-index	80	69	Lead PI	24 of 29 grants

## **INTERNATIONAL LEADERSHIP ROLES**

- 2021 – present Aquarius Habitat Working Group, member
- 2020 – present LabEX CORAIL (France), Scientific Council Member
- 2019 – present Coral Restoration Foundation – Genetics Working Group, member
- 2021 – 2022 G20 Initiative Governing Committee of the International Coral R&D accelerator Platform, member
- 2019 - 2022 International Coral Reef Society, President
- 2019 - 2022 International Coral Reef Symposium Organizing Committee, Member
- 2019 - 2022 International Coral Reef Initiative, ad hoc committee “Inclusion of a Coral Reef-Related Target in the Post-2020 Global Biodiversity Framework” member

## **COMMITTEES AT OHIO STATE UNIVERSITY**

- 2023 - SES DEI Committee, Co-chair
- 2023 - SES Friends of Orton Committee, Member
- 2023 - BPCRC - IRF2 Planning Committee, Member
- 2022 - SES Administrative Committee, Member
- 2017 - SES Mentor Committee for Elizabeth Griffith, Co-Mentor
- 2023 SES Seminar Series Coordinator, Spring 2023
- 2022 - 2023 SES Promotion and Tenure Committee, Chair
- 2014 - 2021 SES Mentor Committee for Audrey Sawyer, Co-Mentor
- 2019 - 2020 SES Search Committee (Ecohydrology), Member
- 2017 - 2021 SES Promotion and Tenure Committee, Chair
- 2017 - 2021 SES Administrative Committee, Member
- 2018 - 2020 Arts and Sciences Investigation Committee, Member
- 2017 - 2020 OSU Research Committee (URC), Member
- 2017 - 2018 SES Faculty Evaluation Committee, Member
- 2013 - 2018 SES Mentor Committee for Michael Wilkins, Co-Mentor
- 2013 - 2017 SES Technical support in geochemistry committee, Chair
- 2015 - 2017 OSU Senate Steering Committee and Senate Executive Council
- 2014 - 2017 OSU Faculty Senator and Faculty Council, Member
- 2008 - 2016 SES Division of Water, Climate and Env. Mini-Symposium, Chair
- 2015 - 2016 Global Water Institute committee, Member
- 2015 - 2016 OSU Graduate Council, Member
- 2013 - 2016 SES Faculty Evaluation Committee, Member
- 2013 - 2016 SES Promotion and Tenure Committee, Member
- 2010 - 2016 SES Advisory Committee to the Director, Member
- 2011 - 2012 SES Concentration: Earth System Science program development, Chair
- 2011 SES Guidelines on Emeritus Space and Resources committee, Chair
- 2010 CAS (College of Arts & Sciences) Parental Leave Working Group, Member
- 2009 - 2011 SES Webpage development, Chair
- 2009 - 2010 SES Curriculum Committee, Member
- 2009 EEOB Plant Ecologist Search Committee, Member
- 2007 - 2008 SES Graduate Committee, Member
- 2007 - 2008 SES Colloquium Committee, Member
- 2007 SES Division of Water, Climate and Environment Seminar, Coordinator
- 2005 - 2012 SES Health and Safety committee, Member

2005 - 2007 SES Curriculum Committee, Member  
2005 - 2007 SES Major in Oceanography program development, Chair

### **OTHER COMMITTEES**

2001 - 2004 U. Pennsylvania Institute for Environmental Studies Advisory Board, Member  
2002 - 2004 U. Pennsylvania Masters of Environmental Science, Faculty Advisor  
2003 U. Pennsylvania Instrumentation Acquisition Committee in Earth Sci, Member

### **LANGUAGES**

English (native language, fluent spoken, read, written)  
French (native language, fluent spoken and read, proficient written)  
Italian (conversational)

### **CERTIFICATIONS**

Marquis Who's Who (2024)  
NSF I-Corps: Great Lakes Region program (in progress)  
Diving: Padi Open Water Diver  
Nauai Submersible Diver, Nauai Nitrox Diver  
SSI Advanced Water Diver, SSI Rescue Diver  
  
Mentorship: Optimizing the Practice of Mentoring (National Research Mentoring Network at the University of Minnesota's Clinical and Translational Science Institute) (Nov 2018)  
  
Leadership: Academic Leadership Program, Committee on Institutional Cooperation (B10) (2013-14)  
President and Provost's Leadership Institute, Ohio State University (2015-16)  
  
Teaching: OSU University Institute for Teaching and Learning Component 1: Teaching Practices Inventory (March 2020)  
OSU University Institute for Teaching and Learning Component 2: Teaching@Ohio State and Reading List Reflection (May 2020)  
New Faculty in Geosciences Workshop, National Science Foundation, hosted by the College of William and Mary (June 2002)

### **PATENTS**

**2022** Grottoli AG, Jackson E, Steck J. Nutrition Therapy for Coral: A Novel Underwater Zooplankton Light Array (UZELA) Technology to Stimulate Coral Feeding and Enhance Recovery rates and Minimize Mortality from Coral Bleaching. Title: P2023-085-7643, Application Number 63/422,692 Filed 11/04/2022, Atty.Docket.No. 103361-386PV1  
**2023** Grottoli AG, Jackson E, Steck J. Systems and Methods for Growing Corals. Title: P2023-085-8285, Application Number PCT/US2023/078357 Filed 11/01/2023, Atty Docket No. 103361-386WO1

### **PEER-REVIEWED PUBLICATIONS** (\*= my student advisee or postdoc)

- 2024 (93) Denis V, Ferrier-Pages C, Schubert N, Coppari M, Baker DM, Camp EF, Gori A, **Grottoli AG**, Houlbrèque F, Maier S, Mancinelli G, Martinez S, Yalçın Ozdilek Y, Radice VZ, Ribes M, Richter C, Viladrich N, Rossi S (2024) The Importance of Heterotrophy in Marine Animal Forests in an Era of Climate Change. *Biological Reviews* <https://doi.org/10.1111/brv.13053>
- 2023 (92) \*Price JT, \*McLachlan RH, Jury CP, Toonen RJ, Wilkins MJ, **Grottoli AG**. Long-term coral microbial community acclimatization is associated with coral survival in a changing climate. *PlosOne*, 18(9): e0291503, doi:10.1371/journal.pone.0291503 ; <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0291503>
- 2023 (91)\*Chapron L, Kuffner IB, Kemp DW, \*Hulver AM, Keister E, Stathakopoulos A, Barlett LA, Lyons EO, **Grottoli AG**. Heterotrophy, microbiome, and location are vital to the restoration of the threatened coral *Acropora palmata*. *Nature Communications Earth and Environment* 4: 233, doi: 10.1038/s43247-023-00888-1, <https://www.nature.com/articles/s43247-023-00888-1>  
 ➤ Press releases from OSU and USGS
- 2022 (90) Vega Thurber R, Schmeltzer ER, Grottoli AG, van Woesik, R, Toonen RJ, Warner M, \*Dobson KL, \*McLachlan RH, Barott KL, Barshis DJ, Baumann JH, \*Chapron L, Combosch DJ, Correa AMS, DeCarlo TM, Hagedorn M, Hedouin L, Hoadley KD, Felis T, Ferrier-Pages C, Kenkel CD, Kuffner IB, Matthews JL, Medina M, Meyer CP, Oster C, \*Price JT, Putnam HM, Sawall Y, Unified methods in collecting, preserving, and archiving coral bleaching and restoration specimens to increase sample utility and interdisciplinary collaboration. *PeerJ* 10:e14176, DOI 10.7717/peerj.14176, <https://peerj.com/articles/14176/>
- 2022 (89) van Woesik R, Shlesinger T, **Grottoli AG**, Toonen R, Vega Thurber R, Warner M, \*Hulver AM, \*Chapron L, \*McLachlan RH, Albright R, Crandall E, DeCarlo TM, Donovan MK, Eirin-Lopez J, Harrison HB, Heron SF, Huang D, Humanes A, Krueger T, Madin J, Manzello D, McManus LC, Matz M, Muller EM, Rodriguez-Lanetty M, Vega-Rodriguez M, Voolstra CR, Zaneveld J, Coral-bleaching responses to climate change across biological scales. *Global Change Biology*, 28:4229–4250. <https://doi.org/10.1111/gcb.16192>  
 ➤ Press releases from OSU and Florida Institute of Technology  
 ➤ Altmetric = 131
- 2022 (88) \*McLachlan RH, \*Price JT, Muñoz-Garcia A, Weisleder NL, Jury CP, Toonen RJ, **Grottoli AG** Physiological acclimatization in Hawaiian corals following a 22-month shift in baseline seawater temperature and pH. *Scientific Reports* 12, 3712 <https://doi.org/10.1038/s41598-022-06896-z>  
 ➤ Press releases by OSU, Oregon State, News stories by NBCNews, National Geographic  
 ➤ Altmetric score = 330, over 4,000 downloads  
 ➤ Top 100 (out of 3150 papers) downloaded papers in Earth, Environment and Ecology for 2022
- 2022 (87) \*Chapron L, \*Schoepf V, \*Levas SJ, Aschaffenburg MD, Warner ME, **Grottoli AG**, Natural variability in Caribbean coral physiology and implications for coral bleaching resilience. *Frontiers of Marine Science* 8:811055, <https://doi.org/10.3389/fmars.2021.811055>
- 2021 (86) \*Price JT, \*McLachlan RH, Jury CP, Toonen RJ, Wilkins MJ, **Grottoli AG**, Effect of species, provenance, and coral physiology on the composition of Hawaiian coral-associated microbial communities. *Coral Reefs* 40:1537–1548 <https://doi.org/10.1007/s00338-021-02164-0>, viewer access at <https://rdcu.be/ct6YU>





- 2021 (85) \*Dobson KL, Ferrier-Pages C, \*Saup CM, **Grottoli AG**, The effects of temperature, light, and feeding on the physiology of *P. damicornis*, *S. pistillata*, and *T. reniformis* corals. *Water* 13:2048 <https://doi.org/10.3390/w13152048>
- 2021 (84) \*McLachlan RH, \*Price J, Muñoz-Garcia A, Weisleder N, Jury C, Toonen R, **Grottoli AG**, Environmental gradients drive physiological variation in Hawaiian corals. *Coral Reefs* 40:1505–1523 <https://doi.org/10.1007/s00338-021-02140-8>
- 2021 (83) \*McLachlan RH, \*Dobson KL, Schmeltzer ER, Vega Thurber R, **Grottoli AG**, A review of coral bleaching specimen collection, preservation, and laboratory processing methods. *PeerJ* 9:e11763 <https://doi.org/10.7717/peerj.11763>
- 2021 (82) \*Dobson KL, \*Levas S, \*Schoepf V, Warner ME, Cai WJ, Hoadley KD, Yuan X, Matsui Y, Melman TF, **Grottoli AG** (2021) Moderate nutrient concentrations are not detrimental to corals under future ocean conditions. *Marine Biology* 168: 98 <https://doi.org/10.1007/s00227-021-03901-3>
- 2021 (81) \*Price JT, \*McLachlan RH, Jury CP, Toonen RJ, **Grottoli AG** (2021) Isotopic approaches to estimating the contribution of heterotrophic sources to Hawaiian corals. *Limnology and Oceanography* 66(6): 2393-2407, <https://doi.org/10.1002/lno.11760>
- 2021 (80) **Grottoli AG**, Toonen RJ, van Woesik R, Vega Thurber R, Warner ME, \*McLachlan RH, \*Price JT, Bahr KD, Baums IB, Castillo KD, Coffroth MA, Cunning R, \*Dobson KL, Donahue MJ, Hench JL, Iglesias-Prieto R, Kemp DW, Kenkel CD, Kline DI, Kuffner IB, Matthews JL, Mayfield AB, Padilla-Gamiño JL, Palumbi S, Voolstra CR, Weis VM, Wu HC. Increasing comparability among coral bleaching experiments, *Ecological Applications* e2262, <https://doi.org/10.1002/eap.2262>
- Press releases by OSU, Penn State, SUNY at Buffalo
  - Wiley top cited Article 2021-2022
  - Altmetric = 136
- 2020 (79) **Grottoli AG**, \*Chapron L, \*Gava D, Olesik J. Natural variability of skeletal elemental phosphorus (P/Ca), lead (Pb/Ca), and barium (Ba/Ca) in the western Pacific sclerosponges *Acanthoecetetes wellsi* and *Astrosclera willeyana*. *Geochemistry, Geophysics, Geosystems* e2020GC009245, <https://doi.org/10.1029/2020GC009245>
- 2020 (78) \*McLachlan RH, \*Price J, \*Solomon A, **Grottoli AG**. Thirty years of coral heat-stress experiments: a review of methods. *Coral Reefs* 39:885–902 <https://doi.org/10.1007/s00338-020-01931-9>
- *Coral Reefs* Best Paper Award Honorable Mention
- 2020 (77) \*Kelsey SA, **Grottoli AG**, Bauer JE, Matsui Y, \*Huey-Sanders TM. Effects of agriculture and tillage practices on isotopic signatures and fluxes of organic and inorganic carbon in headwater streams. *Aquatic Sciences* 82:23 <https://doi.org/10.1007/s00027-019-0691-7>
- 2020 (76) \*Solomon S, **Grottoli AG**, Warner M, \*Levas S, \*Schoepf V, Muñoz-Garcia A. Lipid class composition of annually bleached Caribbean corals. *Marine Biology* 167:7 <https://doi.org/10.1007/s00227-019-3616-z>
- 2019 (75) Parkinson JE, Barker, AC, Baums IB, Davies SW, **Grottoli AG**, Kitchen SA, Matz MV, Miller MW, Shantz AA, Kenkel CD, Molecular tools for coral reef restoration: beyond biomarker discovery. *Conservation Letters* e12687 <https://doi.org/10.1111/conl.12687>

- 2019 (74) Baums IB, Davies SW, Kenkel CD, Kitchen SA, Kuffner, IB Baker, AC, LaJeunesse, TC, Matz, MV, Miller MW, **Grottoli** AG, Palumbi SR, Parkinson JE, Shantz AA, Considerations for maximizing the adaptive potential of restored coral populations in the western Atlantic. *Ecological Applications*, e01978 <https://doi.org/10.1002/eap.1978>  
 ➤ Press release by OSU, Penn State, Secore  
 ➤ Altmetric = 186
- 2019 (73) \*Bellamy AR, Bauer JE, **Grottoli** AG, Contributions of autochthonous, allochthonous, and aged carbon and organic matter contributions to macroinvertebrate nutrition in the Susquehanna River Watershed. *Freshwater Science* 38(3):616-628, <https://doi.org/10.1086/705017>
- 2018 (72) Yuan XH, Cai WJ, Meile C, Hopkinson B, Ding Q, \*Schoepf V, Warner ME, Hoadley KD, Chen B, Liu S, Huang H, Ying Y, **Grottoli** AG, Quantitative interpretation of vertical profiles of calcium and pH in the coral coelenteron. *Marine Chemistry* 204:62-69, <https://doi.org/10.1016/j.marchem.2018.06.001>
- 2018 (71) \*Levas S, **Grottoli** AG, Warner M, \*Schoepf V, Aschaffenburg M, \*Baumann J, Matsui Y, Long-term recovery of Caribbean corals from bleaching. *Journal of Experimental Marine Biology and Ecology* 506:124-134, <https://doi.org/10.1016/j.jembe.2018.06.003>
- 2018 (70) Barker JD, **Grottoli** AG, Lyons WB, Stable isotope evidence for the biogeochemical transformation of ancient organic matter beneath Suess Glacier, Antarctica. *Arctic, Antarctic, and Alpine Research*, 50:e1448643, <https://doi.org/10.1080/15230430.2018.1448643>
- 2018 (69) **Grottoli** AG, \*Dalcin Martins P, Wilkins MJ, Johnston MD, Warner ME, Cai WJ, Melman TF, Hoadley KD, Pettay DT, Hu X, \*Levas S, \*Schoepf V, Coral physiology and microbiome dynamics under combined ocean warming and acidification. *PLoS ONE* 13(1): e0191156, <https://doi.org/10.1371/journal.pone.0191156>  
 ➤ Press release by OSU, 4,267 views  
 ➤ Featured by Hakai Magazine, Technology.org, Science Newline, EurekaAlert!, NewWise  
 ➤ Top 10% most cited article in PLoS ONE for 2018  
 ➤ Altmetric = 120
- 2017 (68) **Grottoli** AG, Tchernov D, Winters G, Physiological and Biogeochemical Responses of Super-Corals to Thermal Stress from the Northern Gulf of Aqaba, Red Sea. *Frontiers in Marine Science* 4:215, <https://doi.org/10.3389/fmars.2017.00215>
- 2017 (67) \*Bellamy AR, Bauer JE, **Grottoli** AG, Influence of land use and lithology on sources and ages of nutritional resources for stream macroinvertebrates: a multi-isotopic approach. *Aquatic Sciences*, 79(4):925-939, <https://doi.org/10.1007/s00027-017-0542-3>
- 2017 (66) \*Tanaka Y, **Grottoli** AG, Matsui Y, Suzuki A, Sakai K, Effects of nitrate and phosphate availability on the tissues and carbonate skeleton of scleractinian corals. *Marine Ecology Progress Series* 570:101-112, <https://doi.org/10.3354/meps12079>
- 2017 (65) \*Schoepf V, Hu X, Holcomb M, Cai WJ, Li Q, Wang Y, Xu H, Warner ME, Melman TF, Hoadley KD, Pettay DT, Matsui Y, \*Baumann JH, **Grottoli** AG. Coral calcification under environmental change: a direct comparison of the alkalinity anomaly and buoyant weight techniques. *Coral Reefs* 36: 13-25, <https://doi.org/10.1007/s00338-016-1507-z>
- 2016 (64) Hoadley KD, Pettay KD, **Grottoli** AG, Cai WJ, Melman TF, \*Levas S, \*Schoepf V, Ding Q, Yuan X, Wang Y, Matsui Y, \*Baumann JH, Warner ME. High temperature acclimation strategies

- within the thermally tolerant endosymbiont *Symbiodinium trenchii* and its coral host, *Turbinaria reniformis*, differ with changing  $p\text{CO}_2$  and nutrients. *Marine Biology* 163:134, <https://doi.org/10.1007/s00227-016-2909-8>
- 2016 (63) \*Williams B, Thibodeau B, Chikaraishi Y, Ohkouchi N, Walnum A, **Grottoli** AG, Colin P. Consistency in coral skeletal amino acid composition offshore of Palau in the western Pacific warm pool indicates no impact of decadal variability in nitricline depth on primary productivity. *Limnology and Oceanography* 62:399-407, <https://doi.org/10.1002/lno.10364>
- 2016 (62)\*Levas SJ, **Grottoli** AG, \*Schoepf V, Aschaffenburg M, \*Baumann J, Bauer JE, Warner M. Can heterotrophic uptake of DOC and zooplankton mitigate C budget deficits in annually bleached corals? *Coral Reefs* 35:495-506, <https://doi.org/10.1007/s00338-015-1390-z>
- 2016 (61) Cai WJ, Ma Y, Hopkinson B, **Grottoli** A, Warner M, Ding Q, Hu X, Yuan X, \*Schoepf V, Xu H, Han C, Melman T, Hoadley K, Pettay DT, Matsui Y, \*Baumann J, \*Levas S, Ye Y, Wang Y. Microelectrode characterization of coral daytime interior pH and carbonate chemistry. *Nature Communications* 7:11144, <https://doi.org/10.1038/ncomms11144>  
 ➤ Press release by OSU, UD, Altmetric = 53
- 2016 (60) LaVigne M, **Grottoli** AG, \*Palardy J, Sherrell RM. Multi-colony calibrations of coral Ba/Ca with a contemporaneous *in situ* seawater barium record. *Geochimica et Cosmochimica Acta* 179:203-216, <https://doi.org/10.1016/j.gca.2015.12.038>
- 2015 (59) Hoadley KD, Pettay DY, **Grottoli** AG, Cai WJ, Melman TF, \*Schoepf V, Hu X, Li Q, Xu H, Wang Y, Matsui Y, \*Baumann JH, Warner ME. Physiological response to elevated temperature and  $p\text{CO}_2$  varies across four Pacific coral species: Understanding the unique host+symbiont response. *Nature Scientific Reports* 5:18371, <https://doi.org/10.1038/srep18371>
- 2015 (58) \*Schoepf V, **Grottoli** AG, \*Levas SJ, Aschaffenburg MD, \*Baumann J, Matsui Y, Warner ME. Annual coral bleaching can impair the long-term recovery capacity of coral. *Proceedings of the Royal Society B* 282 (1819): 20151887. <https://doi.org/10.1098/rspb.2015.1887>  
 ➤ Covered by: OSU press release, Science World Report, Climate Wire, EurekaAlert!, others  
 ➤ Altmetric = 86
- 2015 (57) Andersson AJ, Kline DI, Edmunds PJ, Archer SD, Bednarsek N, Carpenter RC, Chadsey M, Goldstein P, **Grottoli** AG, Hurst TP, King AL, Kubler JE, Kuffner IB, Mackey KRM, Menge BA, Paytan A, Reibesell U, Schnetzer A, Warner ME, Zimmerman RC. Understanding ocean acidification impacts on organismal to ecological scales. *Oceanography* 28(2):16–27, <https://doi.org/10.5670/oceanog.2015.27>
- 2015 (56) \*Tanaka Y, **Grottoli** AG, Matsui Y, Suzuki A, Sakai K. Partitioning of nitrogen sources to coral algal endosymbionts with long-term  $^{15}\text{N}$ -labelling and a mixing model. *Ecological Modelling* 309-310: 163-169, <https://doi.org/10.1016/j.ecolmodel.2015.04.017>
- 2015 (55) \*Levas, S, **Grottoli** AG, Warner ME, Cai WJ, Bauer J, \*Schoepf V, Matsui Y, \*Baumann JH, Melman TF, Hoadley KD, Pettay DT, Q Li, Hu X, Wang Y. Organic carbon fluxes mediated by corals at elevated  $p\text{CO}_2$  and temperature. *Marine Ecology Progress Series*, 519:153-164, <https://doi.org/10.3354/meps11072>
- 2014 (54) \*Schoepf V, McCulloch MT, Warner ME, \*Levas SJ, Matsui Y, Aschaffenburg D, **Grottoli** AG. Short-term coral bleaching is not recorded by skeletal boron isotopes. *PLoS One* 9(11): e112011. <https://doi.org/10.1371/journal.pone.0112011>



- 2014 (53) \*Baumann J, **Grottoli AG**, \*Hughes AD, Matsui Y. Photoautotrophic and heterotrophic carbon in bleached and non-bleached coral lipid acquisition and storage. *Journal of Experimental Marine Biology and Ecology*. 461: 469-478. <https://doi.org/10.1016/j.jembe.2014.09.017>
- 2014 (52) \*Schoepf B, \*Levas SJ, Rodrigues LJ, \*McBride MO, Aschaffenburg MD, Matsui Y, Warner ME, Hughes A, **Grottoli AG**. Kinetic and metabolic isotope effects in coral skeletal carbon isotopes: a re-evaluation using experimental coral bleaching as a case study. *Geochimica et Cosmochimica Acta*. 146: 164-178. <https://doi.org/10.1016/j.gca.2014.09.033>
- 2014 (51) **Grottoli AG**, Warner ME, \*Levas SJ, Aschaffenburg M, \*Schoepf V, McGinley M, \*Baumann J, Matsui Y. The cumulative impact of annual coral bleaching turns some coral species winners into losers. *Global Change Biology* 20(12):3823-3833, <https://doi.org/10.1111/gcb.12658>
- Covered by: OSU Press release
  - NSF Science 360, SciGuru, Smithsonian , Ensia
  - Altmetric = 72
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## DISSERTATION

**Grottoli**-Everett (1998) Interpretation of stable carbon isotopes in reef coral skeletons and application for paleoclimate reconstruction. PhD Dissertation. University of Houston p.225

## NON PEER-REVIEWED PUBLICATIONS (\*=student advisee)

### Published Protocols

- 2021 (8) \*McLachlan RH, \*Patel A, **Grottoli** AG Measuring Coral Skeletal Architecture Using Image Analysis. *Protocols.io*. [dx.doi.org/10.17504/protocols.io.bx5bpq2n](https://doi.org/10.17504/protocols.io.bx5bpq2n)
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### Other Publications

- 2024 Flöter A, Foster GL, Grottoli AG, Swart PK, Williams B, Wörheide G (in press) Hidden from plain sight: sclerosponges as environmental archives of ocean conditions from the surface to the mesophotic zone. *PAGES Magazine* 32(1), doi.org/10.22498/pages.32.1.46
- 2023 **Grottoli** AG. Coral reefs and climate change: we are running out of time. *In: Time: A Multidisciplinary Introduction* [Eds: S Kattan Gribetz & L Kaye], De Gruyter, Berlin, Volume 1, pp. 181- 189. <https://doi.org/10.1515/9783110690774-014>
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**MANSUCRIPTS IN REVIEW AND IN PREP (\* = my student advisees)**

- \*Dobson KL, Jury CP, Toonen RJ, \*McLachlan RH, Williams JC, **Grottoli AG** (in review) Ocean acidification does not prolong recovery of coral holobionts from thermal stress in two consecutive years. (Nature) *Communications in Earth & Environment*
- Grottoli AG**, \*Hulver AM, Vega Thurber R, Toonen R, Schmeltzer ER, Kuffner IB, Barott KL, Baums IB, Castillo KD, \*Chapron L, Coffroth MA, Combosch DJ, Correa AMS, Crandall E, Donahue M, Eirin-Lopez J, Felis T, Ferrier-Pages C, Harrison HB, Heron SF, Huang D, Humanes A, Kenkel CD, Krueger T, Madin J, Manzello DP, Matz MV, McManus LC, Muller EM, Padilla-Gamino JL, Putnam HM, Sawall Y, Shlesinger T, Sweet MJ, Voolstra CR, Weis VM, Wild C, Wu HC (in review) The future of coral bleaching research. *BioScience*
- \*Hulver AM, Carbonne C, Teixidó N, Comeau S, Kemp DW, Keister EF, Gattuso JP, **Grottoli AG** (in review) Elevated heterotrophic capacity as a strategy for Mediterranean corals to cope with low pH at CO<sub>2</sub> vents. *PLoS ONE*
- Baums I, Baker AC, Davies SW, **Grottoli AG**, Kenkel C, Kitchen SA, Kuffner IB, Matz M, Miller MW, Parkinson JE, Prada C, Shantz AA (in prep) Managing expectations for breeding “super corals”. *Proceedings of the National Academy of Sciences*
- Jury CP, Bahr K, Barba E, Brainard R, Cros A, Dobson KL, Graham A, McLachlan RH, Nelson C, Price J, Rochaa de Souza M, Shizuru L, Smith C, Sparagon W, Squair C, Timmers M, Tran T, Vicente J, Webb M, Yamase N, **Grottoli AG**, Toonen R (in prep) Experimental reef communities persist under future ocean acidification and warming. *Global Change Biology*. Preprint: <https://www.researchsquare.com/article/rs-640089/v1>. Grottoli & Toonen are co-senior authors.
- Flöter S, Foster GL, Grottoli AG, Swart PK, Williams B, Wörheide G (in prep) Sclerosponges as archives of environmental change. *Earth Sciences Reviews*
- Schoepf V, Grottoli AG, McLachlan RH, Price JT, Jury CP, Toonen RJ, McCulloch MT (in prep) Coral calcification mechanisms and trace element composition across a natural environmental mosaic in Hawaii. *Limnology & Oceanography*

**FUNDED GRANTS AND FELLOWSHIPS**

- 2023-2026 **National Science Foundation** – Infrastructure Innovation for Biological Research (DBI 2316800), Collaborative Research: CoralReef3D – An open-source toolkit for underwater 3D ecosystem modeling and analysis. Qin R (lead PI), Grottoli AG (co-PI), Porter JW \$880,946.
- 2022-2023 **University of Hawaii Foundation**, Underwater Zooplankton Enhancing Light Array (UZELA): Technological intervention to enhance feeding and protect corals from heat stress. **Partner project under the DARPA Rapid Resilient Reefs for coastal Defense (R3D) project TA3-** Adaptive Biology section (Jones lead-PI, Grant total \$31,560,423) Grottoli AG (PI) \$227,000 (renewable)
- 2020-2021 **Fulbright Fellowship**, all disciplines award (research) (Franco-American Commission for Educational Exchange) €16,800 (delayed to 2021-2022 due to covid)
- 2020-2022 **Cooperative Ecosystem Studies Units (CESU) -Unites States Geological Survey** (G19AC00418), Biological and oceanographic processes impacting the persistence of the threatened *Acropora palmata* coral in Dry Tortugas national Park (sole PI) \$99,772
- 2019-2023 **National Science Foundation** - Biological Oceanography (OCE 1838667), RCN:Coral Bleaching Research Coordination Network. Grottoli AG (sole PI) \$499,828 + \$40,000 supplement. Grottoli is the Director of the Network.

- 2018-2019 **HW Hoover Foundation**, Educating and inspiring the next generation of coral conservation scientists (part II). Grottoli AG (sole PI) \$84,909
- 2016-2018 **HW Hoover Foundation**, Educating and inspiring the next generation of coral conservation scientists. Grottoli AG (sole PI) \$74,991
- 2015-2019 **National Science Foundation** – Biological Oceanography (OCE 1459536), Phenotype and genotype of coral adaptation and acclimatization to global change (with no cost extension to 2020). AG Grottoli (lead PI), \$348,133.
- 2014-2017 **National Science Foundation** – Biological Oceanography (OCE 1514859) RAPID collaborative proposal: Will corals recover from bleaching under ocean acidification conditions? Grottoli AG (lead PI, \$158,420), Toonen RJ (\$27,880).
- 2010-2014 **National Science Foundation** – (EF 1041124) Collaborative Research: Ocean Acidification Category 1: Interactive Effects of Temperature, Nutrients, and Ocean Acidification on Coral Holobiont Physiology and Calcification. Grottoli AG (lead PI), Cai W-J, Warner M \$1,077,588 (amount to Grottoli \$367,800).
- 2012-2013 **PADI Foundation**, Protection for corals from global warming? (CGA# 6314), Grottoli AG, \$8,440
- 2009-2012 **National Science Foundation** – Biological Oceanography (OCE 0825490), Collaborative Research: Physiology and Biogeochemistry of Repeatedly Bleached and Recovering Caribbean Corals. AG Grottoli (lead PI) and M Warner \$764,935 (amount to Grottoli \$388,374).
- 2009 **National Science Foundation** – EAR Instrumentation and Facilities (EAR 0930016), Acquisition of a liquid water isotope analyzer for hydrological, glaciological and geochemical research. Lead PI: AE Carey, Co-PIs: AG Grottoli, IM Howat, WB Lyons, BG Mark \$57,700.
- 2008-2010 **Ohio State University** Carbon, Water, and Climate Seed Grant Program, Natural Variability and Sources of Dissolved and Particulate Carbon in Streams of Various Land-Use Types Within the Coshocton, OH Watershed. AG Grottoli (sole PI) \$52,973
- 2007-2009 **Mellon Foundation**, Natural variability and history of the transfer of terrestrial carbon to the coastal ocean in Puerto Rico. AG Grottoli (sole PI) \$75,000.
- 2005-2009 **National Science Foundation** – Division of Biological Oceanography (OCE0542415), Collaborative research: Acquisition, allocation, and utilization of carbon in bleached and recovering corals. AG Grottoli (lead PI) & TK Pease \$667,660 (amount to Grottoli \$329,780).
- 2004-2007 **National Science Foundation** Division of Chemical Oceanography (OCE0426022 and 0610487), Stable Isotopes and strontium in western Pacific sclerosponges: calibration and applications to paleoceanography, AG Grottoli (sole PI) \$195,249.
- 2004-2006 **Petroleum Research Foundation**, Cadmium and barium in corals: a field study. AG Grottoli (sole PI) \$35,000.
- 2004-2006 **Mellon Foundation**, What is the Effect of Land Use Change on the Carbon Cycle in Puerto Rico? AG Grottoli (sole PI) \$75,000.
- 2004 **Woodrow Wilson National Fellowship**, Career Enhancement Fellowship for Junior Faculty. AG Grottoli \$31,500 and one year of teaching relief.
- 2004 **Trustees Council of Penn Women** Summer Faculty Research Fellowship, Effects of Terrestrially Derived Sediments on Corals in the Guanica Preserve, Puerto Rico over the past century. AG Grottoli (sole PI) \$5000.
- 2004 **University of Pennsylvania Research Foundation**, Late Holocene climate inferred from fossil corals of the Gulf of Aqaba (Red Sea). AG Grottoli (sole PI) \$25,000.

- 2003-2004 **American Society of Mass Spectrometry** Research Award, Developing new geochemical tools for paleoclimate reconstruction: *In situ* calibration of stable isotopes in western tropical Pacific sclerosponges. AG Grottoli (sole PI) \$25,000.
- 2002-2003 **University of Pennsylvania Research Foundation**, Upwelling records in corals: a multi-proxy approach. AG Grottoli (sole PI) \$25,000.
- 2001-2002 **University of Pennsylvania Research Foundation**, Sclerosponge and paleoclimate reconstruction. AG Grottoli (sole PI) \$28,000.
- 1999-2001 **National Ocean and Atmospheric Association** Global Programs, Identification and modeling of seasonal to decadal timescale variations in the zonal currents of the central equatorial Pacific. ERM Druffel (lead PI), ST Gille (co-PI), AG Grottoli (co-PI) \$179, 675.
- 1999-2000 **Dreyfus Postdoctoral Fellowship** in Environmental Chemistry, AG Grottoli \$80,000.
- 1999-2000 **PADI Foundation**, Coral bleaching. AG Grottoli (sole PI) \$8,858.
- 1996-1998 **Environmental Protection Agency** Graduate Students to Achieve Results (STAR) Fellowship, Paleoclimate Reconstruction via Stable Carbon Isotopes ( $\delta^{13}\text{C}$ ) in Reef Coral Skeletons. AG Grottoli \$75,000.

### PROPOSALS PENDING

- 2025-2026 **DARPA Rapid Resilient Reefs for coastal Defense (R3D)** - Underwater Zooplankton Enhancing Light Array (UZELA): Technological intervention to enhance coral feeding, prevent coral bleaching, and minimize coral mortality. (Jones lead-PI, Grant total \$31,560,423) Grottoli AG (PI) \$225,357

### TEACHING EXPERIENCE

(UG = undergraduate students, G = Graduate students, E = typical enrollment numbers)

#### ***The Ohio State University (2005 – present):***

Advanced Oceanography (UG, G, E25)	Intro to Earth System Science (UG, E150)
Principles of Oceanography (UG, E50)	Stable Isotope Biogeochemistry (UG, G, E15)
Carbonate Geology (UG, G, E15)	Carbonate Geology Field Course (UG, G, E15)
Seminar Limnol. & Oceanogr (G, E8)	Pauley Summer Research Program (G, E15)
School of Earth Sciences Colloquium	Independent Study Mentor (UG, G)
Senior Thesis (UG, E2)	Senior Thesis Research (UG, E4)
Global & Environmental Change Div. Seminar	

#### ***University of Pennsylvania (2001 – 2004):***

Carbon Isotope Geochemistry (G, E8)	Recent Climate Change (G, E4)
Introductory Oceanography (UG, E200)	Freshman Seminar in Oceanography (UG, E25)
Independent Study Mentor (UG, G)	

#### ***Adjunct Faculty (1998):***

Evolution, California State U. - Los Angeles (UG, E40)  
 Nutrition, Concordia University, Irvine, CA (UG, E20)

#### ***Teaching Assistant at the University of Houston (1993-1996):***

Ecology (teach/coordinate) Invertebrate Zoology (UG, E10) Genetics (UG, E20/section)

#### ***Live Broadcast Teaching:***

1996 JASON PROJECT VII Education program. 40 live broadcasts from Aquarius Habitat (NURC/NOAA), FL (see <http://www.jason.org>)



**OTHER PROFESSIONAL SYNERGISTIC ACTIVITIES AND RELATED EXPERIENCE****Workshops**

- 2023 ASC DEIJ Committee Chairs workshop, 6 Nov (participant)
- 2023 Tension Dividing Campus? Strategies for Leadership & Collaboration. Ohio State University, ASC Office of Diversity, Equity and Inclusion. 17 Oct 2023 (participant)
- 2023 Microaggression 101 and Microinterventions 102. Ohio State University 20 Jan and 9 Feb (participant)
- 2023 Lead: P&T Dossier Preparation mini-workshop in SES. Ohio State University, 18 Jan
- 2022 COST ACTION CA 20102 Marine Animal Forests of the World, *From the lab to the reefs: assessing heterotrophy in marine animal forests and its importance in guiding conservation strategy*, Participant and presenter, 26-28 Oct (participant)
- 2022 Searching for Inclusive Excellence Workshop, College of Arts and Sciences, Participant, 18 Oct (participant)
- 2022 Directed: Future of Coral Bleaching Research. Coral Bleaching Research Coordination Network (2 July)
- 2021 Directed: Data Assimilation in Coral Bleaching Research. Coral Bleaching Research Coordination Network (11-14 May)
- 2020 Coral Restoration Consortium Genetics Working Group Workshop, Participant (15-17 Dec).
- 2020 Directed: Developing Common Framework for Coral Collection, Archiving, and Sharing. Coral Bleaching Research Coordination Network (22-24 May).
- 2019 Managing for Resilience, International Coral Reef Initiative General Meeting, Townsville, Australia 2 Dec 2019 (participant)
- 2019 Directed: Developing a Common Framework to Enhance Comparability Among Coral Bleaching Experiments. Coral Bleaching Research Coordination Network (22-24 May).
- 2019 “Intelligent” Mentoring Workshop by Dr. Audrey Murrell, 20 March (participant)
- 2019 Lead: P&T Dossier workshop in SES. Ohio State University, 11 Jan
- 2018 Lead: P&T Dossier workshop in SES. Ohio State University, Jan
- 2018 OSU P&T Dossier Workshop for P&T Chairs. Ohio State University, Participant, 11 July
- 2017 Lead: 3 workshops to develop a Faculty Mentor Responsibilities Policy in SES, Fall
- 2017 Lead: 2 workshops to revise the annual faculty report form in SES, Fall
- 2017 OSU P&T Dossier Workshop for P&T Chairs, Ohio State University, Participant, 30 August
- 2017 OSU P&T VITA dossier writing workshop for P&T Chairs, OSU, Participant, 6 September
- 2016 Executive Committee member US Investigators Coral Bleaching Workshop (17-18 June) Honolulu, HI
- 2014 Big10 Academic Alliance - Academic Leadership Program: Workshop on Money, Management, and Strategies. University of Illinois, Participant (10-12 April).
- 2014 Big10 Academic Alliance - Academic Leadership Program: Workshop on Internal and External Relationships in the University, Purdue University, Participant (6-8 Feb)
- 2013 Big10 Academic Alliance - Academic Leadership Program: Workshop on Education, Community Engagement, and Diversity, Michigan State U., Participant (3-5 Oct)
- 2013 Ocean Acidification in the Caribbean workshop. Mote Marine Lab, Sarasota, FL, Participant
- 2010 Organic Sustainability Grant Planning Meeting. Coshocton, OH, Participant
- 2006 Society of Sedimentary Geology (SEPM), course 19: Quaternary Reefs and Platforms: bridging the gap between ancient and the modern. – invited speaker and panelist, American Association of Petroleum Geologists Conference, Houston, TX (April)
- 2004 International Coral Reef pre-Symposium Workshop: Global Change and Coral Reefs

University of Tokyo, Japan, Participant

- 2004 Woodrow Wilson Career Enhancement Fellowship Fall Retreat. Princeton, NJ, Participant
- 2003 Coral Reefs, Climate, and Coral Bleaching Workshop (NOAA, DOI, EPA) (June), Turtle Bay, Hawaii, Participant
- 2003 CREWS: Caribbean Marine Research Center/ Lea Stocking Island (CMRC/LSI) Workshop on Combined factors on coral bleaching think-tank, Bahamas, Participant, (Jan)
- 2001 National Association of Geoscience Teachers Workshop for Early Career Faculty in Geosciences, Teaching, Research, and Managing, College of William and Mary, Participant
- 2001 Finnigan MAT Training Course, University of Ottawa, Participant (Oct)
- 1994 Measurements of Ultraviolet Radiation in Tropical Coastal Ecosystems, University of Hawaii, Honolulu, HI, Participant, (August 3-5)
- 1994 Pauley Summer Program on Ultraviolet Radiation and Coral Reefs, Hawaii Institute of Marine Biology, HI, Participant, (June-August)

***Outreach and Service*** (see also Publicity and Media Outreach below for more)

- 2023 SES Meetup Event at AGU Fall 2023 for all SES faculty, students, staff and alumni, Coordinator and Organizer
- 2023 Research consulting for undergraduate student Dana Marie Bibbs Braxton at Bowling Green State University (underrepresented group person) (22 Mar)
- 2023 OSU-Graduate Faculty Representative PhD Final oral examination for Jack Evans, Molecular, Cellular, & Developmental Biology, 7 March
- 2023 Established team to developed coral reefs and climate change display for Orton Geological Museum in collaboration with undergraduate student Tony Caputo, Prof. Babcock, Coral Reef Systems Farm, and the Columbus Zoo and Aquarium
- 2023 Initiated and developed plans for the establishment of gender-inclusive bathrooms, lactation rooms in Mendenhall and Orton Hall
- 2022 Presented the His Serene Highness the Prince Albert of Monaco II the Lifetime Membership Medal by the International Coral Reef Society (4 July)
- 2022 Expert Panelist, Science-to-Policy Dialogue, 15<sup>th</sup> International Coral Reef Symposium, Bremen, Germany, 5 July
- 2022 Delivered opening and closing ceremonies addresses as President of the International Coral Reef Society at the 15<sup>th</sup> International Coral Reef Symposium, Bremen, Germany (3-8 July)
- 2022 Provided TV and radio interviews as President of the International Coral Reef Society during the 15<sup>th</sup> International Coral Reef Symposium in Bremen, Germany (3-8 July)
- 2022 Delivered the International Coral Reef Society state of the Society address and hosted the Society's General Meeting at the 15<sup>th</sup> International Coral Reef Symposium, Bremen, Germany (6 July)
- 2022 – 2019 Led and ran monthly International Coral Reef Society Officers meetings and quarterly full Council meetings virtually
- 2022 Hosted Columbus School for Girls students for a tour or Orton Hall and a meet-and-greet with the Bownocker speaker Dr. Dr. Lindy Elkins-Tanton (October)
- 2022 Interviewed as international expert for the James Cook University Marine Science Strategy
- 2021 Interviewed by Bexley Public School students about coral reefs and climate change (1 Dec)
- 2021 OSU-Graduate Faculty Representative – PhD Final oral examination for Duncan Johnston, Kinesiology, (24 Mar)1
- 2021 Delivered the International Coral Reef Society state of the Society address and hosted the Society's General Meeting at the 14<sup>th</sup> virtual International Coral Reef Symposium

- 2021 Expert Panelist, Science-to-Policy Dialogue, 14<sup>th</sup> International Coral Reef Symposium, Bremen, Germany, July
- 2020 Research methods and coral reefs presentation, Columbus School for Girls, Middle School Assembly, 9 Dec 2020
- 2020 Directed the development and launch of the International Coral Reef Society's [Plan of Action](#)
- 2019 OSU-Graduate Faculty Representative – PhD Final oral examination for Christofer Johnson, English, 14 Nov
- 2019 Established Coral Bleaching Research Coordination Network protocols website at [www.protocols.io/groups/CoralBleachingRCN\\_protocols](http://www.protocols.io/groups/CoralBleachingRCN_protocols)
- 2018 Established and build the Coral Bleaching Research Coordination Network website at [u.osu.edu/Grottoli.1/coral-bleaching-rcn](http://u.osu.edu/Grottoli.1/coral-bleaching-rcn)
- 2018 - 2019 Louis Stokes Alliances for Minority Participation (LSAMP) Mentor to Kiya Hailu - Program at OSU to increase underrepresented students in STEM fields
- 2018 OSU-Graduate Faculty Representative – PhD final oral examination for Tingyang Zhou, Biophysics, July 13
- 2018 Judge for the 2018 Denmen Undergraduate Research Forum, The Ohio State University
- 2017 Expert discussion leader at the OSU SENR and Office of Energy and Environment's Environmental Film Series screening of the film "Chasing Coral", 30 Oct, Columbus, OH
- 2017 Expert discussion leader at First Unitarian Universalist Church screening of the film "Chasing Coral", 24 Sept, Columbus, OH
- 2017 OSU-Graduate Faculty Representative – PhD final oral examination for Aimee Yoon, Sociology, June
- 2017 Judge for the 2017 Denmen Undergraduate Research Forum, The Ohio State University
- 2016 Interviewed by Olentangy Liberty High School student Amadi Ejouadi, December
- 2014 - 2016 Louis Stokes Alliances for Minority Participation (LSAMP) Mentor to Zuri Brooks - Program at OSU to increase underrepresented students in STEM fields
- 2014 - 2015 Mentor to Postdoc Dr. Jeremy Williams through the Committee on Institutional Cooperation - Professorial Advancement Initiative (CIC-PAI)
- 2014 - 2017 International Coral Reef Society Council Member and Awards Committee Chair
- 2015 Host and organized SES Climate, Water, and the Environment Mini-Symposium (Oct)
- 2015 OSU-Graduate Faculty Representative – PhD Final Oral Examination for Hsiao-chi Chang, EEOB, May
- 2015 Judge for the 2015 Natural and Mathematical Sciences Undergraduate Research Forum, Ohio State University
- 2015 Hosted the Hawaii Institute of Marine Biology Field trip for OSU Alumni in Hawaii
- 2014 Host and organized SES Climate, Water, and the Environment Mini-Film Festival (Oct)
- 2014 Host biology Scholars Program Lab tour and Research experience talk, OSU, Oct
- 2014 OSU – Welcome Commencement Speaker, August
- 2013 OSU-Graduate Faculty Representative – PhD Final Oral Examination of Forrest Raffel, Integrated Biomedical Sciences, Dec
- 2012 Invited speaker at OSU-ASC Renaissance Rediscovery Alumni Program
- 2012 4Coral Research Group: Open House at the Reef Systems Coral Farm
- 2012 Invited speaker at Friendship Village of Columbus senior home for "Great Decisions" discussion on the state of the oceans, March
- 2012 Invited speaker at SCUBAFEST Ohio – Coral conservation and diving

- 2012 OSU-Graduate Faculty Representative – PhD Final Oral Examination of Ryan Harrison in Dept of Education, February
- 2010 - 2014 Young Ocean Explorers Program Director -Batelle Discovery Center
- 2011 Ocean Explorers Tank teacher training session at the Batelle Discovery Center
- 2011 Panelist for the Undergraduate Research Office's Faculty Perspectives on Undergrad. Research panel
- 2011 4Coral Research Group: Open House at the Reef Systems Coral Farm
- 2010 Biology Scholars Program Lab tour and undergrad research experience presentation, Jan
- 2010 Arts and Sciences Parental Leave Working Group member (May – July), OSU
- 2010 Get a Passport Campaign feature, Office of International Affairs, OSU
- 2009 - 2010 School of Earth Sciences Webpage coordinator, The Ohio State University
- 2010 Judge for the 2010 Denman Undergraduate Research Forum, The Ohio State University
- 2009 OSU-Graduate Faculty Representative – PhD Final Oral Examination in History, Sept
- 2009 Judge for the 2009 Undergraduate Research Forum, College of Mathematical and Physical Sciences, Ohio State University
- 2008 OSU-Graduate Faculty Representative – PhD Final Oral Examination in Education, Sept
- 2008 Hosted a Summer Research Opportunity Program student Frances Lugo from Puerto Rico
- 2008 Judge for the 2008 Undergraduate Research Forum, College of Mathematical and Physical Sciences, Ohio State University
- 2008 Science Olympiad Oceanography Coach, Grandview Middle School
- 2007 Hawaii Institute of Marine Biology Pauley Summer Research Program, invited instructor
- 2007 Hosted a Summer Research Opportunity Program student Frances Lugo from Puerto Rico
- 2007 Judge for the 2007 Undergraduate Research Forum, College of Mathematical and Physical Sciences, Ohio State University
- 2007 Science Olympiad Oceanography Coach, Grandview Middle School
- 2007 Student Shadow for a day, 6<sup>th</sup> Grader Tyler Cleveland
- 2006 Dinner for 12 Strangers invited faculty guest, Ohio State University dinner with undergrads, alumni, and faculty
- 2006 Hosted the Hawaii Institute of Marine Biology Field trip for OSU Alumni in Hawaii
- 2006 Stone Lab Oceanography Field trip for undergraduate non-majors
- 2006 Judge for the 2006 Undergraduate Research Forum, College of Mathematical and Physical Sciences, Ohio State University
- 2005 Dominion Middle School, Gifted and Talented program. Presentation and discussion on coral reef conservation with 5<sup>th</sup> graders.
- 2005 Mainland Regional High School Learning about Science. All day interactive visit to three labs in geoscience and bioengineering.
- 2005 Women in Science lecture and discussion for grad/undergrad students
- 2005 New Jersey Aquarium field-trip for undergraduates
- 2003 Gender Equity Panel: panel discussion with undergraduates on women in academia
- 2004 Jersey Shore field-trip for undergraduates
- 2001-2005 Fisher-Hassenfeld House Faculty Fellow in residence full-time, 600 undergrads
- 2001-2005 Research and Careers in Marine Science yearly presentation and discussion with undergraduates
- 2003 Graduate School of Education: Global Climate and ENSO seminar.
- 2003 Healthy Food Choices in Dining: F-H House Healthy Living discussion group leader
- 2004 Penn Reading Project Discussion Group Leader (The Tipping Point, by Gladwell)

- 2003 Penn Reading Project Discussion Group Leader (The Quiet American, by Greene)
- 2002 Penn Reading Project Discussion Group Leader (When Things Fall Apart, by Achebe)
- 2001 Penn Reading Project Discussion Group Leader (Candide, by Voltaire)
- 2002 Women in Leadership Series: panel discussion on women in science with undergrads

**Research Cruises**

- 2020 Florida, *M/V Makai*, 28-30 Nov
- 2011 Maui, *R/V Ka`imikai-o-Kanaloa*, 24 Feb – 4 Mar
- 2005 Gulf of Mexico, *R/V Seward Johnson*, 15-20 Sept
- 2002 Gulfs of Panama and Chiriqui, *R/V Urraca*, 19-26 July
- 2000 Eastern Atlantic, *R/V Knorr*, 9 June – 1 July
- 1999 North Central Pacific, *R/V Melville*, 24 May – 15 June

**Panelist**

- 2023 Regenerating Coral Reefs in a Hot and Sour Ocean. AGU Ocean Vision Summit, Atlanta, GA Invited Panelist (3-6 Apr)
- 2022 Science-to-Policy Dialogue Plenary panelist at the 15<sup>th</sup> International Coral Reef Symposium, 7 July
- 2022 “Chasing Coral” movie viewing and panel discussion, University of Bremen 20 May
- 2021 Virtual Science-to-Policy Dialogue Plenary panelist at the 14<sup>th</sup> International Coral Reef Symposium, July
- 2018 Women in STEMM panelist, OSU STEMM Alumni Association
- 2016 National Science Foundation Biological Oceanography panel
- 2015 National Science Foundation Postdoctoral Research Fellow panel
- 2012 National Science Foundation Ocean Acidification panel
- 2012 Comprehensive Equity at Ohio State (CEOS) and the Women’s Place: Budgeting and Grant Writing panelist
- 2011 Undergraduate Research Office's Faculty Perspectives on Undergrad. Research panel
- 2007 National Science Foundation – Site review panel of the National Ocean Science Accelerator Mass Spectrometry (NOSAMS) facility at Woods Hole Oceanographic Institution, Oct
- 2007 Women in the Science Technology Engineering and Math (STEM) Fields panel: discussion on women in science with undergrads at OSU
- 2005 National Science Foundation – Chemical Oceanography Review Panel
- 2004 Association of American Geographers Annual Meeting: Session 5505 Global Change and Geography of Individual Responsibility Panel, Philadelphia, PA
- 2003 Gender Equity Panel: panel discussion with undergraduates on women in academia
- 2002 Women in Leadership Series: panel discussion on women in science with undergrads

**Scientific Meeting Organizer/Session Chair/co-Chair**

- 2023 Session chair, 2023 American Geophys. Union Fall Meeting, San Francisco, CA 11-15 Dec
- 2019-2022 International Coral Reef Symposium 2021 (ICRS2021) Organizing Committee Member
- 2022 Session chair, 15<sup>th</sup> International Coral Reef Symposium, Bremen, Germany (2-8 July)
- 2021 Session chair, 14<sup>th</sup> International Coral Reef Symposium (virtual) (19-23 July)
- 2018 Session co-chair, Assisted Evolution, Reef Futures 2018, Key Largo, FL (10-14 Dec)
- 2016 Session co-chair and proceedings co-editor, 13<sup>th</sup> International Coral Reef Symposium: Session 36, Assessing and addressing the effects of multiple stressors on coral reefs towards developing effective management and policy responses.
- 2012 Session co-Chair and proceedings co-editor, 12<sup>th</sup> International Coral Reef Symposium: Coral Physiology session



- 2011 Session Chair, American Society of Limnology and Oceanography Meeting, Coral Session S36
- 2008 Session Chair, Ocean Sciences Meeting (AGU/ASLO), Coral Reefs Session 144
- 2006 Session Chair, Benthic Ecology Meeting, Reef Ecology Session
- 2004 Session co-chair and proceedings co-editor, 10<sup>th</sup> International Coral Reefs Symposium: Mini-Symposium on Corals as Recorders of Past Climate

**Research Assistant**

- 1995 University of Houston, Houston, TX

**Lab technician**

- 1991 - 1992 McGill University undergraduate research technician, Montreal, Quebec, Canada

**Visiting Researcher**

- Musée Océanographique, Centre Scientifique de Monaco, Monaco (2013, 2021-22)
- Laboratoire Océanographique de Villefrance, France (2021 – 2022)
- Hawaii Institute of Marine Biology Kaneohe, Hawaii (1994 - 1996, 2006-2007, 2014- present)
- ICMyL-UNAM Field Station, Puerto Morelos, Mexico (2009 – 2011)
- Palau Coral Reef Research Foundation, Koror, Palau (2006)
- Palau International Coral Reef Center, Koror, Palau (2001 – 2003)
- Department of Fish and Wildlife, Saipan, CNMI (2001 – 2006)
- Smithsonian Tropical Research Institute, Panama City, Panama (2002)
- Lawrence Livermore National Laboratory, Livermore, CA (2001)
- Rosenstiel School of Marine and Atmospheric Science. U. of Miami, Miami, FL (1997)

**INVITED SPEAKER**

- 2024 **Global Leadership Initiative Program: Global Sustainability Educational Conference at the Columbus Zoo and Aquarium.** *Saving Coral Reefs* (25 Feb)
- 2023 **OSU Bioarcheology guest lecture** *Stable Isotope Biogeochemistry Basics and Case Studies* (11 Apr)
- Kenyan College** *Coral Reefs and Climate Change: Causes, Consequences, and Solutions* (31 Mar)
- Otterbein College** *Coral Feeding as a Possible Solution to the Coral Bleaching Crisis* (27 Feb)
- Science Café, Ohio State University Libraries** *Solutions to the Coral Bleaching Crisis* (1 Mar)  
96 attendees
- 2022 **Hawaii Institute of Marine Biology** *Role of Heterotrophy in Shallow-Water Tropical Coral Resilience to Climate Change* (16 November)
- COST ACTION Marine Animal Forests of the World [Workshop](#)** *Role of Heterotrophy in Shallow-Water Tropical Coral Resilience to Climate Change* (26 October)
- Reef Futures 2022** Keynote Speaker *The International Coral Reef Society: Magnifying our voice for coral reefs at the national and international level through chapter partnerships* (28 Sept)
- 15<sup>th</sup> International Coral Reef Symposium**, Germany. *ICRS Plenary and Award Ceremony* (8 July)
- Laboratoire Océanographique de Villefranche**, France. *The Future of Coral Reefs* (5 March)
- The Ohio State University**, School of Environment and Natural Resources (May)
- Centre Scientifique de Monaco**, Monaco. *The Future of Coral Reefs* (26 April)
- Université de Perpignan**, France. *The Future of Coral Reefs* (14 April)

- 2021 **American Geophysical Union Fall Meeting**. Rachel Carson Lecturer (Plenary). *The Future of Coral Reefs*. (15 Dec)  
**Reef Futures 2021 (virtual)**. Keynote Speaker *Rebuilding coral reefs: a decadal grand challenge*. (16 Dec)  
**Reef Conservation United Kingdom**. Plenary speaker. *Rebuilding Coral Reefs: A Decadal Grand Challenge* (27 Nov)  
**35<sup>th</sup> International Coral Reef Initiative General Meeting**: *International Coral Reef Society (ICRS) Report*. (25 Jan) <https://www.icriforum.org/events/icrigm35/>  
**Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE)** (Invited virtual seminar) *Coral Reefs and Climate Change: Multiple Stressors and Resilience* (12 Jan) recording [here](#)  
**Pennsylvania State University**, Dept. of Biology (Invited virtual seminar) *Coral Reefs and Climate Change: Multiple Stressors and Resilience* (6 Jan)  
**University of Connecticut**, Department of Marine Science (invited virtual seminar) *Coral Reefs and Climate Change: Multiple Stressors and Resilience* (9 Feb)  
**University of Pennsylvania**, Dept. of Biology (invited virtual seminar) *Coral Reefs and Climate Change: Multiple Stressors and Resilience* (25 Feb)
- 2020 **Columbus School For Girls**, Research methods and coral reefs presentation, Middle School Assembly Speaker, 9 Dec  
**Coral Bleaching Research Coordination Network** Webinar. *Increasing comparability among coral bleaching experiments* (23 Nov)
- 2019 **Scripps Institute of Oceanography at UC-San Diego** (invited talk) *Coral Reefs and Climate Change: How Will They Survive?* (Jan)  
**Under the Sea OSU** Student organization (invited speaker) *Coral Reefs and Climate Change: How Will They Survive?* (Mar)  
**Byrd Climate Change Symposium at OSU** (invited talk) *Biological Impacts of Climate Change* (Mar)  
**University of Georgia** – keynote speaker at Symbiofest *Coral Reefs and Climate Change: How Will They Survive?* (April)  
**Case Western Reserve University** (invited talk) *Coral Reefs and Climate Change: How Will They Survive?* (Nov)  
**International Coral Reef Initiative General Meeting, Australia** (invited talk) *International Coral Reef Society (ICRS) Member Report* (Dec)
- 2018 **University of Toronto – Mississauga** Center for Global Change Science Distinguished Lecture Series (Invited talk) *Coral Reefs and Climate Change: How Will They Survive?* (Jan)  
**Advance Faculty Research Lecture Series – Ohio State University** *Journey of a Marine Scientist* (Feb)  
**Ohio Wesleyan University**, Westerville OH “*Coral Reefs and Climate Change: Journey of a Marine Scientist*” (Mar)  
**Ohio State University, 4<sup>th</sup> Annual ASC Campus Campaign Talent Show**, Invited TED-style talk on *Coral Reefs and Climate Change*. (March)  
**Current: Marine Biology at Ohio State**, Undergraduate Club, “*Coral Reefs and Climate Change: Journey of a Marine Scientist*” (Apr)  
**American Chemical Society, Chemical Abstracts Services** Chemists Celebrate Earth Week, Columbus, OH *Coral Reefs and Climate Change: How Will They Survive?* (Apr)  
**Sea Naggs Scuba Club**, Columbus OH *Coral Resistance and Resilience to Climate Change*

- (Sept)  
**Kent State University**, Department of Geology *Coral Carbon Budgets in the Face of Climate Change* (Sept)  
**Hopkins Marine Laboratory of Stanford University**, Monterrey, CA *Coral Reefs and Climate Change: How Will They Survive?* (Nov)
- 2017 **Atlanta Reef Club**, Atlanta GA *Coral Reefs and Climate Change: How will they survive?* (July)  
**University of Akron**, Department of Biology. *Corals and Climate Change* (March)  
**Ohio State University**, Dept Ecology, Evolution and Organismal Biology – Intro Biology class special lecture. *Corals and Climate Change* (Feb)
- 2016 **Bennington College**, Department of Science and Math. *Corals and Climate Change* (Oct)  
**Coral Reef Task Force Webinar**. *Corals Coping with Climate Change* (April)  
**13<sup>th</sup> International Coral Reef Symposium**, Honolulu, HI. Invited Oral Presentation. *Combined responses of the coral microbiome and coral physiology to elevated temperature and pCO<sub>2</sub>*. (July)  
**Sea Nags Scuba club**, Columbus, OH. *Corals and Climate Change* (September)  
**Ohio State University**, Dept Ecology, Evolution and Organismal Biology – Intro Biology class special lecture. *Corals and Climate Change* (Feb)
- 2015 **TEDx OSU** speaker. *Our Coral Connection* (14 Feb 2015) <http://tedx.osu.edu/> and <https://www.youtube.com/watch?v=10CwOQQiVWc>
- 2014 **Ohio State University**, Welcome Commencement Speaker (25 August)  
<https://www.facebook.com/osu/photos/a.10153110792798858.1073741863.6711658857/10153110798668858/?type=3&theater>
- 2013 **Centre Scientifique de Monaco**. Monaco, Monaco. *Global Warming and Ocean Acidification: How will corals manage?*  
**Mote Marine Lab**, Ocean Acidification Workshop. Sarasota, FL. *Coral Resilience to conditions in 2100?*
- 2012 **Bowling Green State University**, SETGO program, Bowling Green, OH. *Global Warming and Ocean Acidification: How will corals manage?*  
**Otterbein College**, Department of Biology and Earth Science, Westerville, OH. *Global Warming and Ocean Acidification: How will corals manage?*  
**The Ohio State University**, ASC Renaissance Rediscovery Alumni Program, Columbus, OH. *Global Warming and Ocean Acidification: How will corals manage?*  
**The Ohio State University**, School of Earth Science, Columbus, OH. *Global Warming and Ocean Acidification: How will corals manage?*  
**University of Georgia**, Department of Marine Science, Athens, GA. *Global Warming and Ocean Acidification: How will corals manage?*  
**Northeastern University**, School of Marine Science, Boston, MA. *Global Warming and Ocean Acidification: How will corals manage?*  
**Scubafest**, Columbus, OH. *Coral Reef Discovery and Conservation*
- 2011 **University of Michigan**, Smith Lecturer, Department of Geological Sciences, Ann Arbor, MI (June). *Paleoceanography of the Western Tropical Pacific Warm Pool*  
**Université de Québec a Montréal**, GEOTOP, Montreal, PQ, Canada. *Paleoceanography of the Western Tropical Pacific Warm Pool*  
**University of Delaware**, College of Earth, Ocean, and the Environment, Lewes, DE. *Coral bleaching: Resilience and Alternative Strategies: A better understanding of coral bleaching using stable carbon isotopes ( $\delta^{13}C$ )*  
**Ohio State University**, School of Environment and Natural Resources, Columbus, OH. *Coral bleaching: Resilience and Alternative Strategies*

- 2010 **ICMyL-UNAM** Field Station, Faculty of Marine Sciences, Puerto Morelos, QR Mexico. *Carbon and Coral bleaching: Resilience and Alternative Strategies How stable isotopes shed light on physiological processes*  
**Ohio University**, Department of Geological Sciences, Athens, OH. *Coral bleaching: Resilience and Alternative Strategies A better understanding of coral bleaching using stable carbon isotopes ( $\delta^{13}C$ )*  
**Ohio State University**, School of Earth Sciences mini-symposium, Columbus, OH. *The State of Coral Reefs.*
- 2008 **McGill University**, Department of Earth and Planetary Sciences, Montreal, PQ, Canada. *Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals and Sclerosponges: Implications for Paleoceanography and Biology*  
**USGS and University of South Florida** joint seminar, St. Petersburg, FL. *Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals and Sclerosponges: Implications for Paleoceanography and Biology*
- 2007 **Harvard University**, Earth History and Paleobiology Series, Boston, MA. *Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals and Sclerosponges: Implications for Paleoceanography and Biology*  
**College of Wooster**, Department of Geology, Wooster, OH. *Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals and Sclerosponges: Implications for Paleoceanography and Biology*  
**University of Hawaii**, Hawaii Institute of Marine Biology, Kaneohe Bay, HI. *Corals and sclerosponges as geochemical recorders of past climate change*
- 2006 **SEMP** Quaternary Reefs and Platforms: invited speaker and panelist, American Association of Petroleum Geologists Conference, Houston, TX. *Corals and sclerosponges as geochemical recorders of past climate change*  
**Ohio State University**, Environmental Science Graduate Program, Columbus, OH. *Paleoceanography Using Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals and Sclerosponges*  
**Bowling Green State University**, Department of Biological Sciences, Bowling Green, OH. *Coral bleaching: Resilience and Alternative Strategies*  
**Ohio State University**, Dept Ecology, Evolution, and Organismal Biology (EEOB), Columbus, OH. *Coral bleaching: Resilience and Alternative Strategies*  
**Ohio State University**, School of Earth Sciences Brown Bag, Columbus, OH. *Coral bleaching Alternative Strategies, Resilience, and Isotopic Signatures*  
**University of Hawaii**, School of Ocean and Earth Science (SOEST), Honolulu, HI. *Coral bleaching: Resilience and Alternative Strategies*  
**University of Hawaii**, Hawaii Institute of Marine Biology, Kaneohe Bay, HI. *Corals and sclerosponges as geochemical recorders of past climate change*  
**University of Cincinnati**, Department of Biology, Cincinnati, OH. *Heterotrophic Plasticity, Energy Reserves, and Resilience in Bleached Corals*
- 2005 **State University of New York - Albany**, Department of Earth and Atmospheric Sciences, Albany, NY. *Paleoceanography Using Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals and Sclerosponges*
- 2004 **Pennsylvania State University**, Department of Geosciences, University Park, PA. *Paleoceanography Using Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals and Sclerosponges*  
**Washington Geological Society**, Washington, DC. *Paleoceanography Using Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals and Sclerosponges*  
**Goldschmidt Plenary Speaker**, Copenhagen, Denmark. *Stable Carbon Isotopes ( $\delta^{13}C$ ) in Corals: An Experimental Approach and Applications for Paleoceanography*  
**Ohio State University**, Department of Geological Sciences, Columbus, OH. *Paleoclimatology*

*and Paleoceanography Using Carbon Isotopes in Corals and Sclerosponges*

**University of Texas Marine Science Institute** Schweppe Seminar speaker, Port Aransas, TX. *Carbon Isotopes in Corals and Sclerosponges: Applications for Paleoclimate Reconstruction*

**University of Texas Marine Science Institute** Schweppe Seminar Public Evening Lecture, Port Aransas, TX. *The Effect of Human Impacts and Coral Bleaching on Coral Reef*

*Ecosystems: Implications for Coral Reef Conservation*

**Association of American Geographers** Annual Meeting, Session 5505 Global Change and Geography of Individual Responsibility Panel, Philadelphia, PA. *Individual Responsibility and Global Climate Change.*

2003 **Rutgers University**, Institute of Marine Sciences, New Brunswick, NJ. *Carbon in corals and sclerosponges*

**University of Maryland**, Department of Geology, College Park, MD. *Carbon in corals and sclerosponges.*

**Columbia University**, Lamont-Doherty Earth Observatory, New York, NY. *Carbon in corals and sclerosponges.*

**Northwestern University**, Department of Geology, Chicago, IL. *Carbon in corals and sclerosponges*

**CREWS workshop**, CMRC/LSI Workshop, Bahamas. *Effect of bleaching on the coral host total lipid content, lipid class composition, and skeletal stable isotopic composition*

**University of Pennsylvania**, Graduate School of Education, Philadelphia, PA. *Global Climate and ENSO.*

**University of Pennsylvania**, Institute for Environmental Studies, Philadelphia, PA. *Coral Reefs: Conservation and Case Studies*

2002 **University of Pennsylvania**, Department of Biology, Philadelphia, PA. *Coral Bleaching and Resilience*

**University of Pennsylvania**, Department of Earth & Environmental Science, Philadelphia, PA. *Radiocarbon record in a Fanning Island coral: Inter-decadal variability in waters upwelling in the central equatorial Pacific from 1922-1956.*

**University of Pennsylvania**, Institute for Environmental Studies, Philadelphia, PA. *Coral Reefs: Conservation and Case Studies*

2001 **University of Pennsylvania**, Dept. Earth & Environmental Science. Philadelphia, PA. *Coral Bleaching and Resilience.*

**University of Pennsylvania**, Institute for Environmental Studies. *Coral Reefs: Conservation and Case Studies*

**University of Pennsylvania**, Goldberg House. *Coral Reefs: Human Impacts and Conservation*

**Temple University**, Department of Geology, Philadelphia, PA. *Radiocarbon record in a Fanning Island coral: Inter-decadal variability in waters upwelling in the central equatorial Pacific from 1922-1956*

2000 **Florida International University**, Department Biological Sciences Seminar, West Miami, FL. *Interpretation of stable carbon isotopes in reef coral skeletons and application for paleoclimate reconstruction.*

**University of Washington**, Quaternary Research Center Seminar, Seattle, WA. *Interpretation of stable carbon isotopes in reef coral skeletons and application for paleoclimate reconstruction.*

**University of Pennsylvania**, Department Earth and Environmental Science, Philadelphia, PA. *Interpretation of stable carbon isotopes in reef coral skeletons and application for paleoclimate reconstruction.*



- American University**, Department of Biology Seminar, Washington, DC. *Interpretation of stable carbon isotopes in reef coral skeletons and application for paleoclimate reconstruction.*
- 1999 **Columbia University**, Biosphere 2, Tuscon, AZ. *Interpretation of stable carbon isotopes in reef coral skeletons and application for paleoclimate reconstruction.*
- University of California – Irvine**, Department of Ecology & Evolutionary Biology, Irvine, CA. *Coral Reefs: Conservation and Global Change*
- 1998 **University of California – Irvine**, Department of Earth System Science, Irvine, CA. *Coral Reefs: Conservation and Global Change*
- 1996 **Shamenade University**, Department of Biology, Honolulu, HI. *Tools for Paleoclimate Reconstruction.*

### **PUBLISHED ABSTRACTS** (\*= my student advisees)

- 2024 (244) Barker T, Dobson K, bulling M, Poor SR, Peters L, Craggs J, Grottoli A, Sweet M. Can sunscreen be positive for corals? European Coral Reef Symposium, Naples, Italy July 2024, ID526
- 2024 (243) Schoepf V, Grottoli AG, McLachlan RH, Price JT, Jury CP, Toonen RJ, DeCarlo EH, McCulloch MT. Coral calcification mechanisms and trace element composition across a natural environmental mosaic in Hawaii. European Coral Reef Symposium, Naples, Italy July 2024, ID671
- 2023 (242) Grottoli AG, Chapron L, Hulver AM, Kuffner IB, Kemp DW, Warner M. Stable Isotope Reveal Variability of Heterotrophically Acquired Carbon Contributions to Healthy Caribbean and Florida Corals Across Species, Time, and Geographic Locations. American Geophysical Union Fall Meeting 2023, San Francisco, CA Abstract# 1344541
- 2023 (241) Hulver AM, Carbonne C, Teixido N, Comeau S, Keister EF, Kemp DW, Gattuso JP, Grottoli AG. Heterotrophic adaptation of two Mediterranean corals to low pH at volcanic CO<sub>2</sub> vents. American Geophysical Union Fall Meeting 2023, San Francisco, CA
- 2023 (240) Dobson KL, Jury CP, Toonen RJ, McLachlan RH, Williams JC, Grottoli AG. Ocean acidification does not prolong recovery of coral holobionts from thermal stress in two consecutive years. Reef Conservation UK Annual Meeting, Newcastle upon Tyne, United Kingdom
- 2023 (239) Grottoli, AG. *In situ* feeding technology use in restoration and conservation to improve coral survivorship and growth. AGU Ocean Vision Summit, Atlanta, GA Invited Panelist (3-6 Apr)
- 2022 (238) Grottoli, AG. The International Coral Reef Society: Magnifying our voice for coral reefs at the national and international level through chapter partnerships. Reef Futures 2022, Key Largo, FL, Invited Keynote
- 2022 (237) Kenkel CD, Baums IB, Baker AC, Davies SW, Grottoli AG, Kitchen SA, Kuffner IB, Matz MV, Miller MW, Parkinson JE, Prada C, Shantz AA (2022) Managing expectations for selective breeding of future corals: The super coral myth. Reef Futures 2022, Key Largo, FL Oral presentation
- 2022 (236) Chapron L, Grottoli AG, Kuffner IB, Hulver AM, Kemp DW, Stathakopoulos A, Barlett LA, Lyons EO. Biological processes impacting the persistence of the threatened *Acropora palmata* coral in the Dry Tortugas National Park. (oral presentation) Reef Futures 2022, Key Largo FL
- 2022 (235) Kuffner I, Kaufman L, Baums I, Grottoli A, Kleypas J, Banaszak A. Coral-reef restoration and *Kintsugi*, the art of repairing cracked pottery. 15<sup>th</sup> International Coral Reef Symposium, Bremen Germany. 3-8 July, Oral Presentation
- 2022 (234) Hulver AM, Carbonne C, Teixido N, Comeau S, Gattuso JP, Grottoli A. Acclimation potential of Mediterranean corals to pH levels expected later this century. 15<sup>th</sup> International Coral Reef Symposium, Bremen Germany. 3-8 July, Oral Presentation

- 2022 (233) Grottoli A, Vega Thurber R, van Woesik R, Toonen R, Warner M, McLachlan R, Schmeltzer E, Price J, Dobson K, Bahr K, Barott K, Barshis D, Baums I, Baumann J, Castillo K, Chapron L, Coffroth MA, Combosch D, Cuning R, Correa A, DeCarlo T, Donahue M, Felis T, Ferrier-Pagès C, Hagedorn M, Hedouin L, Hench J, Hoadley K, Iglesias-Prieto R, Kemp D, Kenkel D, Kline D, Kuffner I, Matthews J, Mayfield A, Medina M, Meyer C, Oster C, Padilla-Gamino J, Palumbi S, Putnam H, Sawall Y, Voolstra C, Weis V, Wu H. Increasing comparability among coral bleaching experiments and maximizing sample utility across studies. 15<sup>th</sup> International Coral Reef Symposium, Bremen Germany. Oral Presentation Abstract A-1344
- 2022 (232) Jury C, Bahr K, Barba E, Brainard R, Cros A, Dobson K, Graham A, McLachlan R, Nelson C, Price J, Rocha de Souza M, Shizuru L, Smith C, Sparagon W, Squir C, Timmers M, Tran T, Vincente J, Webb M, Yamase N, Grottoli A, Toonen R. Experimental reef communities persist under mitigated future ocean acidification and warming. 15<sup>th</sup> International Coral Reef Symposium, Bremen Germany. 3-8 July, Oral Presentation Abstract A-1968
- 2021 (231) Grottoli AG. The future of coral reefs (Division of Ocean Sciences Rachel Carson Plenary Lecture), American Geophysical Union Fall Meeting, New Orleans, LA., OS31A-01
- 2021 (230) Grottoli AG. Rebuilding coral reefs: a decadal grand challenge. Reef Futures 2021 Virtual. Oral presentation.
- 2021 (229) Knowlton N, Grottoli AG, Kleypas J, Obura D, Corcoran E, de Goeij JM, Felis T, Harding S, Mayfield AB, Miller MW, Osuka KE, Peixoto RS, Randall KJ, Voolstra CR, Wells S, Wild C, Ferse SCA. Rebuilding coral reefs – a decadal grand challenge, Reef Conservation United Kingdom virtual meeting. Oral presentation
- 2021 (228) Grottoli AG, Toonen RJ, van Woesik R, Vega Thurber R, Warner ME, McLachlan RH, Price JT, Bahr KD, Baums IB, Castillo KD, Coffroth MA, Cuning R, Dobson KL, Donahue MJ, Hench JL, Iglesias-Prieto R, Kemp DW, Kenkel CD, Kline DI, Kuffner IB, Matthews JL, Mayfield AB, Padilla-Gamiño JL, Palumbi S, Voolstra CR, Weis VM, Wu HC. Increasing comparability among coral bleaching experiments, 14th International Coral Reef Symposium (virtual), 19-23 July, Oral presentation ICRS2021-759
- 2021 (227) Hulver AM, Carbonne C, Teixido N, Comeau S, Gattuso JP, Grottoli A. Mediterranean coral *Cladocora caespitosa* exposed to future ocean acidification conditions. 14th International Coral Reef Symposium (virtual), 19-23 July, Oral presentation ICRS2021
- 2021 (226) Price J, McLachlan R, Jury C, Toonen R, Wilkins M, Grottoli A. Variability in the Hawaiian coral microbiome suggests important relationships between microbes and coral resilience to global climate change. 14th International Coral Reef Symposium (virtual), 19-23 July, Oral presentation ICRS2021
- 2021 (225) McLachlan RH, Price J, Jury C, Dobson K, Toonen R, Grottoli A. Can Hawaiian corals acclimate to ocean warming and acidification after two years of exposure? 14th International Coral Reef Symposium (virtual), 19-23 July, Oral presentation ICRS2021
- 2021 (224) Dobson K, Levas S, Schoepf V, Warner M, Cai WJ, Hoadley K, Yuan X, Matsui Y, Melman T, Grottoli A. Moderate nutrient concentrations are not detrimental to corals under future ocean conditions. 14th International Coral Reef Symposium (virtual), 19-23 July, Oral presentation ICRS2021
- 2021 (223) Charpon L, Kuffner I, Stathakopoulos A, Barlett L, Lyons E, Grottoli AG. Biological processes impacting the persistence of the threatened *Acropora palmata* coral in Dry Tortugas National Park. 14th International Coral Reef Symposium (virtual), 19-23 July, Oral presentation ICRS2021

- 2021 Dixon S, Grottoli A, McLachlan R, Price J, Jury C, Dobson K, Toonen R. The effect of long-term temperature and pH stress on Symbiodiniaceae density in *Montipora capicata*, *Porites lobata*, and *Porites compress* coral. 14th International Coral Reef Symposium (virtual), 19-23 July, Poster presentation ICRS2021-2499
- 2019 (222) Dobson K, Levas S, Schoepf V, Warner M, Cai WJ, Hoadley K, Yuan X, Mtsui Y, Melman T, Grottoli AG. Coastal environments with moderate nutrient concentrations may provide refuge to corals under predicted future ocean conditions, Byrd Climate Change Symposium, 22 March, Columbus, OH
- 2019 (221) McLachlan R, Price J, Jury C, Dobson K, Toonen R, Grottoli AG. Global Climate Change: Can coral cope? Physiological variation informs conservation strategies, Byrd Climate Change Symposium, 22 March, Columbus, OH
- 2019 (220) Price J, McLachlan R, Jury C, Toonen R, Wilkins MJ, Grottoli AG. Assessment of the coral microbiome across a range of natural temperature and  $p\text{CO}_2$  environments, Byrd Climate Change Symposium, 22 March, Columbus, OH
- 2019 (219) Baums IB, Baker AC, Davies SW, **Grottoli AG**, Kenkel CD, Kitchen SA, Kuffner IB, LaJeunesse TC, Matz MV, Miller MW, Parkinson JE, Shantz AA. How to maximize future adaptive potential of restored coral populations. Association of Marine Laboratories of the Caribbean Meeting, Punta Cana, Dominican Republic
- 2018 (218) **Grottoli AG**, \*Dalcin Martins P, Wilkins MJ, Johnston MD, Warner ME, Cai WJ, Melman TF, Hoadley KD, Pettay DT, Hu X, \*Levas S, \*Schoepf V, Coral physiology and microbiome dynamics under combined ocean warming and acidification. American Geophysical Union Meeting, Washington, DC, poster: OS21F-1632
- 2018 (217) Shantz A, Baker A, Baums I, Davies S, **Grottoli A**, Kenkel C, Kitchen S, Kuffner I, LaJeunesse T, Matz M, Miller M, Parkinson J, Incorporating phenotypic traits in coral restoration. Reef Futures 2018, Key Largo, FL, oral presentation: CRC90113
- 2018 (216) **Grottoli AG**, Tchernov D, Winters G., Physiological and Biogeochemical Responses of Super-Corals to Thermal Stress from the Northern Gulf of Aqaba, Red Sea , Reef Futures 2018, Key Largo, FL, oral presentation: CRC8321.
- 2018 (215) Price JT, McLachlan RH, Jury CP, Toonen RJ, Wilkins MJ, **Grottoli AG**, Assessment of the coral microbiome and the underlying coral physiology across a natural range of natural temperature and  $p\text{CO}_2$  environments in Hawaii, Reef Futures 2018, Key Largo, FL, oral presentation: CRC57106.
- 2018 (214) Smith A, Price JT, McLachlan RH, Jury CP, Toonen R, **Grottoli AG**, Natural variability in the contribution of heterotrophic carbon to tissues of Hawaiian corals, Reef Futures 2018, Key Largo, FL, poster: CRC13177.
- 2018 (213) Dobson KL, Levas S, Schoepf V, Warner ME, Cai WJ, Yuan X, Hoadley K, Matsui Y, Melman TF, **Grottoli AG**, Interactive effects of elevated temperature,  $p\text{CO}_2$ , and moderate nutrients on the physiology and biogeochemistry of two species of Indo-Pacific coral, Reef Futures 2018, Key Largo, FL, oral presentation: CRC90107
- 2018 (212) Solomon S, **Grottoli AG**, Warner ME, Levas S, Schoepf V, Munoz-Garcia A, Lipid class profiles of annually bleached Caribbean corals inform coral selection for restoration, Reef Futures 2018, Key Largo, FL, oral presentation: CRC48195.
- 2018 (211) McLachlan RH, Price JT, Jury CP, Dobson KL, Toonen R, **Grottoli AG**, Phenotypic Variation in Hawaiian Corals Provides Insight into Coral Selection for Restoration, Reef Futures 2018, Key Largo, FL, oral presentation: CRC26179.

- 2018 (210) Kenkel C, Baker A, Baums I, Davies S, **Grottoli** A, Kitchen S, Kuffner I, LaJeunesse T, Matz M, Miller M, Parkinson J, Shantz A, Population genetic considerations for coral restoration, Reef Futures 2018, Key Largo, FL, oral presentation: CRC21193.
- 2018 (209) Miller M, Baker A, Baums I, Davies S, **Grottoli** A, Kenkel C, Kitchen S, Kuffner I, LaJeunesse T, Matz M, Parkinson J, Shantz A, Restoration provenance strategies to improve climate resilience, Reef Futures 2018, Key Largo, FL, oral presentation: CRC57155.
- 2018 (208) Parkinson J, Baker A, Baums I, Davies S, **Grottoli** A, Kenkel C, Kitchen S, Kuffner I, LaJeunesse T, Matz M, Miller M, Shantz A, Molecular Tools For Coral Reef Restoration: Beyond Biomarker Discovery, Reef Futures 2018, Key Largo, FL, oral presentation: CRC1349
- 2018 (207) Baums IB, Baker AC, Davies SW, **Grottoli** AG, Kenkel CD, Kitchen SA, Parkinson JE, Kuffner IB, LaJeunesse TC, Matz MV, Miller MW, Shantz AA. How to maximize future adaptive potential of restored coral populations, Reef Futures 2018, Key Largo, FL, oral presentation: CRC4141.
- 2018 (206) **Grottoli** AG, Coral reefs and climate change: we are running out of time. Metaphors of Time: an interdisciplinary conversation across the arts, humanities, and sciences, Ohio State University, Columbus, OH
- 2017 (105) Jury CP, Newell M, \*Dobson KL, \*McLachlan RH, Marko P, **Grottoli** AG, Toonen RJ. Local adaptation drives coral resilience under ocean acidification and climate change. ASLO 2017 Aquatic Sciences Meeting. Honolulu, HI. Abstract #30008
- 2017 (104) \*Moore, AE, \*McLachlan RH, Jury CP, \*Dobson KL, Toonen RJ, **Grottoli** AG. Variability in Hawaiian coral across a natural range of temperature,  $p\text{CO}_2$  and flow gradients. 126<sup>th</sup> Annual Meeting of the Ohio Academy of Sciences, Cincinnati, OH 8 April 2017. Poster No. 042
- 2016 (103) LaVigne M, Cobb KM, DeLong K, Freiburger M, **Grottoli** AG, Hill TM, Miller H, Nurhati I, Richey J, Serrato Marks G, Sherrell RM. Using coral Ba/Ca records to investigate seasonal to decadal scale biogeochemical cycling in the surface and intermediate ocean. American Geophysical Union Meeting, San Francisco, CA, December. Abstract ID: 163912 (Invited Oral)
- 2016 (102) **Grottoli** AG, \*Martins PD, Wilkins MJ, Johnston MD, Warner ME, Cai WJ, Melman TF, Hoadley KD, Pettay DT, \*Schoepf V. Combined responses of the coral microbiome and coral physiology to elevated temperature and  $p\text{CO}_2$ . 13<sup>th</sup> International Coral Reef Symposium, Honolulu, HI 19-24 June, Abstract ID:27996, (Invited Oral)
- 2016 (101) \*Dobson KL, **Grottoli** AG, Jury C, Newell M, Marko P, \*Kadri A, \*Snyder K, \*McLachlan R, Toonen RJ. Recovery of *Montipora capitata* and *Porites compressa* from bleaching under ocean acidification conditions, 13<sup>th</sup> International Coral Reef Symposium, Honolulu, HI, 19-24 June, Abstract ID: 29624, (oral)
- 2016 (100) \*McLachlan RH, **Grottoli** AG, Jury CP, \*Dobson K, Toonen RJ. Survey of Hawaiian coral physiology across a natural range of temperature and pH gradients. 13<sup>th</sup> International Coral Reef Symposium, Honolulu, HI, 19-24 June, Abstract ID:29770 (poster).
- 2016 (99) Tanaka Y, **Grottoli** AG, Matsui Y, Suzuki A, Kazuhiko S. Effects of nitrate and phosphate availability on the biomass, stable carbon isotopes, and growth rates of scleractinian corals, 13<sup>th</sup> International Coral Reef Symposium, Honolulu, HI, 19-24 June, Abstract ID:28498 (poster)
- 2016 (98) Newell ML, Jury CP, Knapp IS, Toonen RJ, \*Dobson KL, \*McLachlan R, **Grottoli** AG, Marko PB. *Symbiodinium* diversity in *Porites compressa* following a natural bleaching event, 13<sup>th</sup> International Coral Reef Symposium, Honolulu, HI, 19-24 June, Abstract ID: 29747 (poster)
- 2016 (97) Jury CP, Newell ML, \*Dobson K, \*McLachlan R, Marko P, **Grottoli** AG, Toonen RJ, Local Adaptation drives coral resilience to ocean acidification and climate change, 13<sup>th</sup> International Coral Reef Symposium, Honolulu, HI, 19-24 June, Abstract ID: 29277 (oral)

- 2016 (96) Cai WJ, Ma Y, Hopkinson B, **Grottoli** AG, Warner ME, Ding Q, Hu X, Yuan X, \*Schoepf V, Xu H, Han C, Melman TF, Hoadley KD, Pettay DT, Matsui Y, \*Baumann JH, \*Levas S, Ying Y, Wang Y. Coral interior carbonate chemistry measured with pH and carbonate microelectrodes suggests that the chemistry of the calcifying fluid affects resilience to OA, 13<sup>th</sup> International Coral Reef Symposium, Honolulu, HI, 19-24 June, Abstract ID: 28076 (oral)
- 2016 (95) Guerra A, Kozdon, **Grottoli** AG, Sherrell R. A coral record of seawater barium concentration recording variations in continental freshwater input to the Gulf of Panama. Ocean Sciences Meeting, New Orleans, MI
- 2015 (94) Cai WJ, Ma Y, **Grottoli** AG, Warner ME, Hopkinson B, Ding q, Hu X, Yuan X, \*Schoepf V, Melman, TF, Hoadley KD, Pettay DY, Matsui Y, \*Baumann JH, \*Levas S, Wang Y. Corals control interior pH and carbonate chemistry as revealed by microelectrode profiles. Ocean Acidification Principal Investigators' Meeting. Woods Hole, MA (poster)
- 2014 (93) \*Saup C, **Grottoli** AG, Ferrier-Pages C, Matsui Y. Physiological and isotopic responses of the coral *Stylophora pistillata* to future coastal ocean conditions. Geological Society of America Annual Meeting. Session 209. Vancouver, Canada. (poster)
- 2014 (92) LaVigne M, \*Matthews KA, **Grottoli** AG, \*Palardy J, Sherrell M. Multi-colony calibrations of coral Ba/Ca with a contemporaneous *in situ* seawater barium record. American Geophysical Union meeting, San Francisco, CA
- 2014 (91) \*Williams B, Thibodeau B, Chikaraishi Y, **Grottoli** A. Nitrogen isotopic composition of proteinaceous coral skeletal amino acids records change in source nitrate to the euphotic zone in the western tropical Pacific. American Geophysical Union meeting, San Francisco, CA
- 2014 (90) \*Baumann J, **Grottoli** AG, Matsui Y, \*Hughes A. Acquisition and allocation of carbon to lipids of bleached and healthy Hawaiian corals. Benthic Ecology Meeting, Jacksonville Florida
- 2013 (89) Tanaka Y, **Grottoli** AG, Matsui Y, Suzuki A, Sakai K. Estimation of internal and external nitrogen for corals with long-term <sup>15</sup>N-labelling experiment and subsequent model calculations. European Geosciences Union meeting, April. EGU2014-9565
- 2013 (88) **Grottoli** AG, Warner ME, Cai WJ, Bauer JE, \*Schoepf V, \*Levas SJ, Melman T, Hoadley KD, Pettay DT, Hu X, Wang Y, Matsui Y. Interactive effects of elevated *p*CO<sub>2</sub> and temperature on the physiology of four species of Pacific corals. Ocean Acidification Principal Investigators' Meeting. Sept 18-20, 2013, Washington, DC (poster)
- 2013 (87) Cai WJ, Ding Q, Ma Y, Wang Y, **Grottoli** AG, Warner ME, Hopkinson B, Hu X. Microelectrode profile measurements of pH, CO<sub>3</sub><sup>2-</sup> and Ca<sup>2+</sup> inside coral polyps. Ocean Acidification Principal Investigators' Meeting. Sept 18-20, 2013, Washington, DC (poster)
- 2012 (86) **Grottoli** AG, \*Schoepf V, Warner ME, Cai W-J, Melmann T, \*Baumann J, Matsui Y, Pettay DT, Hoadley K, Xu H, Wang Y, Li Z, Hu X. Interactive effect of elevated *p*CO<sub>2</sub> and temperature on coral physiology and calcification: a glimmer of hope? The Ocean in a High-CO<sub>2</sub> World 3<sup>rd</sup> International Symposium, Monterrey CA.
- 2012 (85) \*Schoepf V, Hu X, **Grottoli** AG, Cai W-J, Warner ME, Melman T, Xu H, Li Q, Wang Y, Hoadley K, Pettay DT, \*Baumann J, Matsui Y. Coral calcification under elevated *p*CO<sub>2</sub> and temperature: a comparison of the buoyant weight and alkalinity anomaly methods. The Ocean in a High-CO<sub>2</sub> World 3<sup>rd</sup> International Symposium, Monterrey CA, Poster 182.
- 2012 (84) \*Schoepf V, **Grottoli** AG, Warner ME, Cai WJ, Melman T, \*Baumann J, Matsui Y, Pettay D, Hoadley K, Wang Y, Xu H, Li Q, Hu X. Interactive effects of elevated *p*CO<sub>2</sub> and temperature on coral calcification and energy reserves. 12<sup>th</sup> International Coral Reef Symposium (ICRS), Cairns, Australia.
- 2012 (83) \*Levas S, **Grottoli** AG, Warner ME, \*Schoepf V, \*Baumann J, Aschaffenburg M, Matsui Y,



- Bauer J. DOC fluxes in healthy and bleached *Montastraea faveolata*, *Porites astreoides*, and *Porites divaricata* corals. 12<sup>th</sup> International Coral Reef Symposium (ICRS), Cairns, Australia.
- 2012 (82) **Grottoli** AG, Warner ME, \*Levas SJ, Aschaffenburg M, \*Schoepf V, McGinley M, Matsui Y. What combinations of coral species and Symbiodinium are more resilient to repetitive bleaching? 12<sup>th</sup> International Coral Reef Symposium (ICRS), Cairns, Australia.
- 2012 (81) \*Baumann J, **Grottoli** AG, \*Levas S, Matsui Y, \*Hughes A. Acquisition and Allocation of Carbon to Lipids of Bleached and Non-bleached Hawaiian Corals. 12<sup>th</sup> International Coral Reef Symposium (ICRS), Cairns, Australia.
- 2012 (80) Hoadley K, Pettay DT, Warner ME, **Grottoli** AG, Melman T, \*Baumann J, Matsui Y, Cai WJ, Hu X, Wang Y, Xu H, Li O. The impact of elevated CO<sub>2</sub> and temperature on the photosynthetic physiology and symbiosis stability of four Pacific reef-building corals. 12<sup>th</sup> International Coral Reef Symposium (ICRS), Cairns, Australia.
- 2012 (79) Warner ME, **Grottoli** AG, Aschaffenburg MD, McGinley N, \*Levas S, \*Schoepf V. The impact of repetitive bleaching on the photobiology and balance of *Symbiodinium* distributions in three Caribbean corals. 12<sup>th</sup> International Coral Reef Symposium (ICRS), Cairns, Australia.
- 2011 (78) **Grottoli** AG, Cai WJ, Warner M, Melman T, \*Schoepf V, \*Baumann J, Matsui Y, Pettay DT, Hoadley K, Xu H, Wang Y, Li Q, Hu X. Interactive effect of elevated CO<sub>2</sub> and temperature on coral physiology. American Geophysical Union (AGU) Meeting, San Francisco, CA Abstract number OS33B-1667.
- 2011 (77) Bauer JE, Guo L, Perkey DW, Raymond P, Bianchi TS, **Grottoli** AG, Matsui Y. Divergent Radiocarbon Age Distributions of Carbon Pools in a Major Temperate River: Implications for Sources, Reactivity, and Land-Ocean Exchanges. American Geophysical Union (AGU) Meeting, San Francisco, CA Abstract number B32C-05.
- 2011 (76) \*Moyer R, **Grottoli** AG, Bauer JE. Carbon isotope (13C and 14C) biogeochemistry of small mountainous rivers and coastal coral skeletons in Puerto Rico. Geological Society of America Annual Meeting, Minneapolis, Abstract# 194651
- 2011 (75) **Grottoli** AG, Warner ME, \*Levas SJ, Aschaffenburg MD, Schoepf V, McGinley MP. The effect of repeat bleaching on coral species-algal symbiont type combinations and resilience. American Society of Limnology and Oceanography (ASLO) Ocean Science Meeting, San Juan, Puerto Rico.
- 2011 (74) \*Levas SJ, \*Schoepf V, Warner ME, **Grottoli** AG. Energy reserves and calcification of bleached *Montastraea faveolata*, *Porites astreoides*, and *Porites divaricata*. American Society of Limnology and Oceanography (ASLO) Ocean Science Meeting, San Juan, Puerto Rico.
- 2011 (73) \*Schoepf V, \*Levas SJ, Warner ME, **Grottoli** AG. The effect of repeat bleaching on energy reserves of three Caribbean coral species. American Society of Limnology and Oceanography (ASLO) Ocean Science Meeting, San Juan, Puerto Rico.
- 2011 (72) McGinley MP, Aschaffenburg MD, **Grottoli** AG, Levas SJ, Schoepf V, Warner ME. Temporal dynamics of *Symbiodinium* populations in Caribbean corals following a repetitive bleaching experiment. American Society of Limnology and Oceanography (ASLO) Ocean Science Meeting, San Juan, Puerto Rico.
- 2011 (71) \*Huey TM, **Grottoli** AG, Matsui Y. Land-use impact on the character and age of carbon in small temperate streams. American Society of Limnology and Oceanography (ASLO) Ocean Science Meeting, San Juan, Puerto Rico.
- 2011 (70) \*Borg D, **Grottoli** AG, Olesik J. Natural Variability of Trace Metals in Two Species of Sclerosponges from Palau and Saipan. American Society of Limnology and Oceanography (ASLO) Ocean Science Meeting, San Juan, Puerto Rico.

- 2011 (69) \*Baumann J, **Grottoli** AG, \*Levas S, \*Schoepf V, Warner M. The effects of repeat bleaching on P/R and feeding rates of three species of Caribbean coral. American Society of Limnology and Oceanography (ASLO) Ocean Science Meeting, San Juan, Puerto Rico.
- 2011 (68) Bauer JE, \*Moyer RP, Raymond PA, **Grottoli** AG. Divergence in global riverine DOC and POC ages: implications for the carbon cycle. American Society of Limnology and Oceanography (ASLO) Ocean Science Meeting, San Juan, Puerto Rico.
- 2011 (67) \*Levas SJ, **Grottoli** AG, \*Hughes AD, Pease TK. Energy reserves, calcification, and carbon allocation of bleached *Porites lobata*. Minorities Striving and Pursuing Higher Degrees of Education in Earth Sciences Phase III, National Sciences Foundation, Washington D.C.
- 2010 (66) **Grottoli** AG, \*Hughes AD, Pease TK, Osburn CL. The effect of bleaching on dissolved organic carbon (DOC) production in three species of Hawaiian corals. 2010 American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Portland, OR
- 2010 (65) \*Levas S, **Grottoli** AG, \*Hughes AD, Pease TK. Energy reserves, calcification, and carbon allocation of bleached *Porites lobata*. 2010 American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Portland, OR
- 2010 (64) \*Matsui Y, **Grottoli** AG, \*Huey T. Natural variability and sources of dissolved and particulate carbon in the streams of small watersheds of various land-use types within the North Appalachian Experimental Watershed in Ohio. 2010 American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Portland, OR
- 2010 (63) Bauer JB, \*Moyer R, **Grottoli** AG. Carbon isotope geochemistry of tropical small mountainous river systems and adjacent coastal waters of Puerto Rico. 2010 American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Portland, OR
- 2010 (62) Gray RE, Polyak L, Crawford KA, Council EA, Darby DA, **Grottoli** AG. Depth-dependent sedimentation patterns on the Mendeleev Ridge, Central Arctic Ocean. Presentation at the 40th International Arctic Workshop, Winter Park, CO.
- 2009 (61) Kilbourne KA, \*Moyer RP, Quinn TM, **Grottoli** AG. Testing coral-based tropical cyclone reconstructions: an example from Puerto Rico, Second International Summit on Hurricanes and Climate Change, Corfu, Greece, Aegean Conference Series, vol. 41, p. 69, abstract 49, May 31-June 5
- 2008 (60) \*Williams B, **Grottoli** AG. High-resolution  $\delta^{13}\text{C}$ ,  $\delta^{15}\text{N}$ , and trace element records from a western tropical Pacific near-surface black coral and a mid-water soft coral. Fall AGU, San Francisco, CA
- 2008 (59) LaVigne M, Anagnostou E, Cobb K, Field MP, **Grottoli** AG, \*Matthews KA, Lazar B, Wellington GM, Sherrell RM. Phosphorus in coral skeleton: Evidence and species-specific global calibrations for a novel seawater phosphate proxy. Fall AGU, San Francisco, CA
- 2008 (58) \*Moyer R, **Grottoli** AG. Corals as recorders of land-ocean carbon transport in Puerto Rico using stable carbon isotopes and Ba/Ca. 11<sup>th</sup> International Coral Reef Symposium, Ft. Lauderdale, FL
- 2008 (57) \*Williams B, **Grottoli** AG. Comparison of stable isotope records from a western Pacific shallow-water soft coral and a black coral. 11<sup>th</sup> International Coral Reef Symposium, Ft. Lauderdale, FL
- 2008 (56) \*Chrystal A, **Grottoli** AG, \*Rodrigues L. Identification of bleaching events in coral skeletal records using high-resolution stable isotope and trace element records. 11<sup>th</sup> International Coral Reef Symposium, Ft. Lauderdale, FL

- 2008 (55) \*Rodrigues LJ, **Grottoli** AG, Lesser M. Long-term Changes in the Chlorophyll Fluorescence of Bleached and Recovering Corals from Hawaii. 11<sup>th</sup> International Coral Reef Symposium, Ft. Lauderdale, FL
- 2008 (54) **Grottoli** AG, \*Hughes AD, Pease TK. Acquisition and allocation of carbon in bleached Hawaiian corals. 11<sup>th</sup> International Coral Reef Symposium, Ft. Lauderdale, FL
- 2008 (53) \*Palardy J, \*Rodrigues L, **Grottoli** A. The importance of zooplankton to the total energy budget of healthy and bleached corals at two depths. 11<sup>th</sup> International Coral Reef Symposium, Ft. Lauderdale, FL
- 2008 (52) LaVigne M, Anagnostou E, Cobb K, Field MP, **Grottoli** AG, Linsley B, Sherrell RM, Wellington GM. Coralline P/Ca: Evidence for a new seawater PO<sub>4</sub> proxy. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Orlando, FL
- 2008 (51) \*Moyer R, **Grottoli** AG. Stable and Radiocarbon Isotopes in Corals and Adjacent Natural Waters: Land-Use Change, Land-Ocean Carbon Flux and Coral Reefs. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Orlando, FL
- 2008 (50) \*Hughes AD, Grottoli AG, Pease TK. Recovery from bleaching: autotrophic and heterotrophic carbon acquisition in two Hawaiian corals during recovery from thermally-induced bleaching. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Orlando, FL
- 2008 (49) **Grottoli** AG, \*Hughes AD, Pease TK. Acquisition and allocation of carbon in bleached Hawaiian corals. 2008 American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Orlando, FL
- 2008 (48) Hurley LEA, \*Hughes AD, **Grottoli** AG, Pease TK. Variability in the lipid class and isotopic compositions of the Hawaiian coral *Porites compressa*, and its symbiotic zooxanthellae. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Orlando, FL
- 2007 (47) \*Matthews KA, **Grottoli** AG, McDonough WF, \*Palardy JE. High resolution coral Cd measurements using LA-ICP-MS and ID-ICP-MS: calibration and interpretation. American Geophysical Union Fall 2007 Meeting, San Francisco, CA.
- 2007 (46) \*Adler R, Polyak L, Ortiz J, **Grottoli** AG, Kaufmann D. Late Quaternary Paleoceanography of the Mendeleev Ridge, Central Arctic Ocean: Planktonic Foraminiferal Composition and Stable Isotopy, Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract PP51A-0183
- 2007 (45) Sherrell RM, LaVigne M, Anagnostou E, Field MP, **Grottoli** A, Wellington J, Adkins J, Gagnon A. A P/Ca proxy for seawater phosphate in surface and deep-sea corals: application to laser ablation and solution phase HR-ICP-MS. Chemical Oceanography Gordon Conference, Tilton, NH, August 2007
- 2007 (44) **Grottoli** AG. Calcification in sclerosponges: implications for reconstructing CO<sub>2</sub> fluxes in the tropics. American Society of Limnology and Oceanography, Santa Fe, NM, p. 68
- 2007 (43) \*Matthews KA, **Grottoli** AG, McDonough WF. Natural variability of coral Cd/Ca from an upwelling region: implications for proxy record interpretation. American Society of Limnology and Oceanography, Santa Fe, NM, p. 116-117
- 2007 (42) \*Moyer RP, **Grottoli** AG. Stable-and radiocarbon isotopes in corals and adjacent natural waters: reconstructing land-use change and the land-ocean carbon cycle. American Society of Limnology and Oceanography, Santa Fe, NM, p.126
- 2007 (41) \*Williams BD, **Grottoli** AG. Carbon and nitrogen stable isotopes from gorgonian soft corals

- as recorders of nutrient fluxes in the western equatorial Pacific. American Society of Limnology and Oceanography, Santa Fe, NM, p. 194
- 2007 (40) \*Adler R, Polyak L, Kaufman DS, **Grottoli** AG. Sedimentary record of the last two glacial (stadial) cycles on the Mendeleev Ridge, central Arctic Ocean. 37th International Arctic Workshop, Program and Abstracts May 3-5, 2007. The Earth Science Institute, University of Iceland, pp. 272.
- 2007 (39) Hurley L, \*Hughes AD, **Grottoli** AG, Pease TK. Spatial variability of  $\delta^{15}\text{N}$  and  $\delta^{13}\text{C}$  in tissues of the Hawaiian coral *Porites compressa*. Estuarine Research Federation, Providence RI, Nov 2007
- 2007 (38) \*Hughes AD, **Grottoli** AG, Pease TK. Thermally induced bleaching alters carbon flow between host, symbiont and skeleton in two Hawaiian corals. Estuarine Research Federation, Providence RI, Nov 2007
- 2006 (37) \*Moyer R, **Grottoli** AG. Stable carbon isotopes in coastal Puerto Rico corals and adjacent natural waters: implications for land-ocean connectivity and land-use history. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Honolulu, Abstract # OS25J-14
- 2006 (36) **Grottoli** AG. Calibration and natural variability of skeletal stable carbon isotopes in the Pacific sclerosponge *Acanthocheatetes wellsi*: implications for reconstructing  $\text{CO}_2$  uptake in coastal tropical environments. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, Honolulu, Abstract #OS35G-14
- 2006 (35) **Grottoli** AG. Corals and sclerosponges as geochemical recorders of past climate change. American Association of Petroleum Geologists and the Society of Sedimentary Geology, April 13-14, Houston, TX.
- 2006 (34) **Grottoli** AG, \*Rodrigues LJ, \*Palardy JE. Heterotrophic plasticity, energy reserves, and resilience in bleached corals. Benthic Ecology Meetings, Quebec, Canada
- 2006 (33) \*Rodrigues LJ, **Grottoli** AG, Pease T. Lipid classes in bleached and recovering *Porites compressa* and *Montipora capitata* corals from Hawaii. Benthic Ecology Meetings, Quebec, Canada
- 2005 (32) \*Matthews KA, McDonnough WF, **Grottoli** AG. Natural variability of coral Cd/Ca using a novel isotope dilution ICP-MS method. American Geophysical Union Fall Meeting, San Francisco
- 2005 (31) \*Palardy, JE, \*Rodrigues, LJ, **Grottoli**, AG. Heterotrophic input in three species of healthy and bleached reef-building corals. 90th Annual Meeting of the Ecological Society of America. August 7-12, 2005. PAL-1109-620265
- 2005 (30) \*Palardy JE, \*Rodrigues LJ, **Grottoli** AG. Feeding rates in healthy and bleached reef-building Hawaiian corals. Benthic Ecology Meetings, Williamsburg, VA
- 2005 (29) \*Rodrigues LJ, **Grottoli** AG. Energy reserves and metabolism in bleached and recovering *Porites compressa* and *Montipora capitata* corals from Hawaii. Benthic Ecology Meetings, Williamsburg, VA
- 2005 (28) **Grottoli** AG, Adkins JF, Moots K. Natural variability in skeletal growth rate, stable isotopes, and Sr/Ca composition in two species of Pacific sclerosponges (*Acanthocheatetes wellsi* and *Astroclera welleyana*). Benthic Ecology Meetings, Williamsburg, VA
- 2004 (27) \*Rodrigues LJ, **Grottoli** AG. Stable oxygen ( $\delta^{18}\text{O}$ ) and carbon ( $\delta^{13}\text{C}$ ) isotopes in the skeleton of bleached and recovering corals from Hawaii. American Geophysical Union Fall Meeting, San Francisco, CA, B14B-08
- 2004 (26) \*Matthews K, **Grottoli** AG, McDonough WF, \*Palardy JE. Natural variability of

- environmental proxies in corals from an upwelling region. American Geophysical Union Fall Meeting, San Francisco, CA PP23B-1429
- 2004 (25) **Grottoli AG**. Stable carbon isotopes ( $\delta^{13}\text{C}$ ) in coral skeletons: experimental approach and applications for paleoceanography. American Geophysical Union Fall Meeting, San Francisco, CA, B14B-07
- 2004 (24) \*Rodrigues LJ, **Grottoli AG**. Lipids, carbohydrates, and proteins in bleached and recovering corals from Kaneohe Bay, Hawaii. 10<sup>th</sup> International Coral Reef Symposium, June 28-July 2 Okinawa, Japan
- 2004 (23) \*Palardy JE, **Grottoli AG**, \*Matthews K. The effect of morphology, polyp size and depth on feeding in three species of Panamanian corals. 10<sup>th</sup> International Coral Reef Symposium, June 28-July 2 Okinawa, Japan
- 2004 (22) **Grottoli AG**, Gibb O. Stable carbon isotope records in a Palau sclerosponge. 10<sup>th</sup> International Coral Reef Symposium, June 28-July 2 Okinawa, Japan
- 2004 (21) \*Matthews KA, **Grottoli AG**, McDonough WF, \*Palardy JE. The effect of upwelling, species and depth on the natural variability of cadmium in three species of Panamanian corals. 10<sup>th</sup> International Coral Reef Symposium, June 28-July 2 Okinawa, Japan
- 2004 (20) **Grottoli AG**. Stable carbon isotopes ( $\delta^{13}\text{C}$ ) in corals: An experimental approach and applications for paleoceanography. Goldschmidt Conference, Copenhagen, Denmark. Abstract # 0.0.12. *Geochimica et Cosmochimica Acta* 68(11):A22 supp
- 2004 (19) **Grottoli AG**, Gibb O. Stable carbon and oxygen isotope records in a Palau sclerosponge. Goldschmidt Conference, Copenhagen, Denmark. Abstract # 4.63.25, *Geochimica et Cosmochimica Acta* 68(11): A474 supp
- 2004 (18) **Grottoli AG**. River discharge and coral reefs: effects of terrestrially derived sediments on corals in the Guanica Preserve, Puerto Rico over the past century. Woodrow Wilson National Fellowship Retreat. Princeton, New NJ, Oct 2004.
- 2004 (17) Palardy JE, **Grottoli AG**, \*Matthews K. The effect of morphology, polyp size and depth on feeding in three species of Panamanian corals. The 33rd Annual Marine Benthic Ecology Meeting, Mobile Alabama. March 26-28. Abstract 10362
- 2004 (16) **Grottoli AG**, \*Rodrigues LJ, \*Juarez C. Effect of bleaching on the coral host total lipid content, lipid class composition, and skeletal stable isotopic composition. The 1<sup>st</sup> Annual Combined Effects Think Tank to Support CREWS Modeling. March 2003, LSI Bahamas.
- 2003 (15) Hönisch B, Hemming NG, **Grottoli AG**, Amat A, Hanson GN, Bijma J. The effect of light, respiration and  $p\text{CO}_2$  on  $\delta^{11}\text{B}$  in coral skeletons: results from culture and field experiments. European Geological Society – American Geophysical Union Joint Assembly, Nice, France.
- 2003 (14) **Grottoli AG**, Gibb O, Wellington GM. Pre-treatment effects on coral skeletal  $\delta^{13}\text{C}$  and  $\delta^{18}\text{O}$ . American Geophysical Union Fall Meeting, San Francisco. Abs. PP11A-0198
- 2002 (13) **Grottoli AG**. Stable carbon isotope record in a Palau Sclerosponge. American Geophysical Union Fall Meeting, San Francisco. PP51A-0287
- 2002 (12) \*Rodrigues LJ, **Grottoli AG**, \*Juarez C. Effect of bleaching on lipid biomass in two Hawaiian coral species. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting 2002, Honolulu Abs. OS21F-124
- 2002 (11) **Grottoli AG**, Gille ST, Druffel ERM, Dunbar RB. Radiocarbon in a Fanning Island coral: inter-decadal variability in waters upwelling in the central equatorial Pacific from 1922 - 1955. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting 2002, Honolulu.
- 2000 (10) **Grottoli AG**, Druffel ERM, Gille ST, Dunbar RB. Identification of seasonal-to-decadal



- timescale variations in the zonal currents of the central equatorial Pacific prior to 1955 using  $\Delta^{14}\text{C}$  in coral. American Geophysical Union Fall Meeting, San Francisco. Abs. OS22H-02
- 2000 (9) **Grottoli** AG, Druffel ERM, Gille ST, Dunbar RB. Identification of seasonal to decadal timescale variations in the zonal currents of the central equatorial Pacific prior to 1955 using  $\Delta^{14}\text{C}$  in coral. 9<sup>th</sup> International Coral Reef Symposium, Bali, Indonesia. Abs. A17.16
- 2000 (8) **Grottoli** AG. Stable carbon isotopes in coral skeletons. American Society of Limnology and Oceanography and American Geophysical Union Ocean Sciences Meeting, San Antonio, TX Abs. OS21N-04
- 2000 (7) \*Juarez C, **Grottoli** AG. Lipid concentrations in bleached and non-bleached Hawaiian corals. UC-Irvine Undergraduate Research Forum.
- 1999 (6) **Grottoli** AG. Interpretation of stable carbon isotopes in reef coral skeletons and applications for paleoclimate reconstruction. Dissertation Initiative Advancement of Limnology and Oceanography (DIALOG III) p.56
- 1999 (5) **Grottoli** AG. Interpretation of stable carbon isotopes in reef coral skeletons and applications for paleoclimate reconstruction. Dissertation Symposium on Chemical Oceanography (DISCO XV), Honolulu, HI p.6
- 1998 (4) **Grottoli** AG. Coral skeletal  $\delta^{13}\text{C}$  as a paleo-tracer of solar irradiance levels and zooplankton concentrations: an experimental approach. American Geophysical Union Fall Meeting, San Francisco. Abstract OS41A-10
- 1997 (3) **Grottoli**-Everett AG. Effect of irradiance and heterotrophy on the stable carbon isotopic ( $\delta^{13}\text{C}$ ) composition of scleractinian corals. United States Environmental Protection Agency Science to Achieve Results (STAR) Graduate Fellowship Program: Technical Conference, June 16-17, Research Triangle Park, North Carolina. EPA/600/R-97/049, p70
- 1996 (2) **Grottoli**-Everett AG, Wellington GM. Effect of light and zooplankton on skeletal  $\delta^{13}\text{C}$  in the eastern Pacific corals *Pavona clavus* and *P. gigantea*. 8<sup>th</sup> International Coral Reef Symposium, Panama. Abstract p. 78
- 1996 (1) **Grottoli**-Everett AG. The effect of bleaching on lipid levels in the coral *Montipora verrucosa*. American Society of Zoologists, St. Louis, MO. Abstract in: American Zoologist 34(5):70a

## MEETINGS ATTENDED

8<sup>th</sup> -15<sup>th</sup> International Coral Reef Symposium 1996, 2000, 2004, 2008, 2012, 2016, 2021, 2022  
 34<sup>th</sup> - 36<sup>th</sup> International Coral Reef Initiative General Meeting (presenter) 2019, 2021, 2022  
 American Geophysical Union Fall Meeting (AGU) 1999, 2001 – 2005, 2011, 2018, 2021  
 American Society of Limnology and Oceanography (ASLO) Meeting 2007, 2009, 2011  
 Ocean Sciences Meeting (ASLO/AGU) 2000, 2002, 2006, 2008, 2010  
 American Association for the Advancement of Science Meeting 2018  
 The Ocean in a High-CO<sub>2</sub> World 3<sup>rd</sup> International Symposium (2012)  
 Dissertation Symposium on Chemical Oceanography (DISCO XV) 1999  
 Environmental Protection Agency (EPA) Technical Conference 1997  
 Byrd Center Symposium for Climate Research 2019, 2020, 2023  
 Ocean Acidification PI Meeting (NSF-OCB) 2013  
 American Society of Zoologists Meeting 1994  
 Benthic Ecology Meeting 2005, 2006  
 Goldschmidt Conference 2004  
 Reef Futures 2018, 2021  
 Metaphors of Time 2018

Startup Midwest 2023  
Symbiofest 2019

## PROFESSIONAL MEMBERSHIPS

International Coral Reef Society  
American Association for the Advancement of Science  
Geochemical Society  
American Geophysical Union  
The Ohio Academy of Sciences  
Sigma Xi

## PUBLICITY and MEDIA OUTREACH

- 2002 Interviewed and quoted in “Female Profs Talk About Their Careers” Daily Pennsylvanian, Feb
- 2003 Interviewed and quoted in “Science Lacking in Female Faculty” Daily Pennsylvanian, 29 Oct
- 2003 Interviewed and quoted in “Female Faculty Panel Addresses Gender Equity Issues” Daily Pennsylvanian
- 2005 Interviewed and featured in “Carbon Counter: The Undersea/Oversea World of Andrea Grottoli” PENN Arts and Science Magazine (Winter)
- 2006 **Grottoli et al (2006) Nature** paper media coverage:  
[Press release](#) in OSU Research News  
Radio Interviews: NPR [interview](#) (Science Fridays Talk of the Nation) (28 April) ; Quirks and Quarks radio show [interview](#) (CBC Radio Canada) ; Earth Watch Radio  
Selected Additional Press Coverage: Science (AAAS) online [article](#) ; Discovery Channel News [article](#) ; Christian Science Monitor [article](#) ; Nature News online [article](#) ; Scientific American [article](#) ; The Daily Grist [article](#) ; News Wise.com [article](#) ; Columbus Dispatch [article](#) ; Global Water News Watch [article](#) ; The Washington Post, Belgian Popular-Scientific monthly, Eos
- 2007 Media coverage of Press Conference at the Ocean Sciences meeting (4 March): Science Daily [article](#); Physorg.com [article](#) ; Newswise.com [article](#)
- 2008 **LaVigne et al.** (2008) Geophysical Research Letters media coverage: AGU Editor’s Choice highlights [article](#) ; Science Magazine Editor’s Choice article
- 2008 National Science Foundation - Multimedia Communications interview for 14-part video series on “To What Degree: What Science Tells us About Climate Change” by the [Research Channel](#)
- 2008 Interviewed and quoted in: “Mission: implausible: the desperate plight of coral reefs has led to some extraordinary rescue plans. Mark Schrope weighs them up.” By Mark Schrope. New Scientist 200.2678: p28(4), 18 Oct
- 2010 [Grottoli research](#) featured in Global Perspective (OSU Office of International Affairs publication)
- 2010 Field research experience for undergrads featured by Office of International Affairs – Get a Passport campaign. Posters were displayed on campus buses and at other locations.
- 2010 Interviewed and quoted in “[Nas Caraíbas existem corais que conseguem sobreviver ao calor](#)” by Helena Gerales in Portuguese e-news (PÚBLICO [www.publico.pt](#))
- 2010 **Williams & Grottoli** (2010) Geophysical Research Letters media coverage:  
Press releases: OSU [article](#) ; AGU [article](#)  
Australian Broadcasting Company Radio [interview](#)  
Select additional press coverage: Nature highlights [article](#) ; Msnbc [article](#) ; World News [article](#) ; USA today [article](#) ; Science daily [article](#) ; Eurekalert [article](#) ; Pollution online [article](#) ; Yahoo [article](#) ; Summit County Voice [article](#) ; Our Amazing Planet [article](#) ; Ocean Leadership [article](#)

- 2010 National Science Foundation Press release [article](#) for Grottoli NSF-funded OA research
- 2011 [Edge of Light](#): OSU Video Feature of Grottoli coral research
- 2011 Interviewed and featured in “[An Ocean of Trouble](#)” by Dylan Tussel in the Columbus Dispatch
- 2011 Video interview and by American Reef for Ocean Acidification and Global Warming Coral Project research [Part I](#) ; [Part II](#)
- 2009 – present Grottoli [@CoralResearch](#) Twitter Micro-blog of ongoing coral research
- 2014 Interviewed and quoted in EPA STAR interview “[Fellow Success Story](#)”, Jan
- 2014 Interview with Mary McLaughlin, assistant to Franklin County Commissioner Paula Brooks on the Presidential Task Force on Climate Preparedness and Resilience, about the impact of ocean acidification and global change on Ohio, 9 April
- 2014 Interview with high school student Zain about ocean acidification and global change, 4 April
- 2014 **Grottoli et al. (2014)** Global Change Biology media coverage:  
 OSU Press release [article](#)  
 NSF Science 360 Breaking news [cover story](#) ; Science News SciGuru.com [article](#) ;  
 Smithsonian.com [article](#) ; Ensia [article](#)
- 2014 Grottoli undergraduate student Casey Saup featured in OSU College of Arts and Sciences Current [Student Research Profile](#)
- 2014 Interview and featured in Westfall High School newspaper The Echo 50(3):5 by Leah Solomon
- 2015 Interviewed and featured in “[Ohio State, U. Hawaii Scientists Test Ability Of Corals To Adapt To Acidification](#)” by Daniel Kelly, Environmental Monitor, Sep.
- 2015 **TEDx OSU [Grottoli invited speaker](#) (14 Feb) Our Coral Connection**
- 2015 **Schoepf et al. (2015) Proceedings of the Royal Society B** media coverage:  
 Press Releases: OSU press release [article](#) ; UWA press release [article](#); U Delaware press [article](#)  
 Radio Interview: ABC Radio Geraldton [interview](#), Australia 17-11-15  
 RTR FM 92.1 Perth, Australia, The Mag Show [interview](#) 23-11-15  
 Select additional press coverage: Press release point [article](#) ; Science World Report [article](#) ;  
 Gulf News [article](#) ; Customs Today [article](#) ; International Business Times [article](#) ;  
 Environmental Monitor [article](#) ; ABC The Drum [article](#) ; EurekaAlert! [article](#) ;  
 ClimateWire [article](#)
- 2015 “[As the Earth enters its third mass bleaching event, will corals survive?](#)” by Andrea Grottoli (20 Nov 2015) The Conversation  
 ➤ 9,222 unique reads, republished by IFLScience, The Huffington Post, Honolulu Civil Beat, others
- 2015 Interviewed and quoted in “[Warm El Nino Water Killing Pacific Corals](#)” by Eric Niller in Discovery News, 2 Dec
- 2016 Interviewed and featured in “Resilient Reefs” by D Kelly Environmental Monitor. p.47-48, Winter
- 2016 Interviewed and quoted in “[Corals Experiencing Record-long Bleaching from El Nino](#)” by Pola Lem in ClimateWire, 25 Feb
- 2016 **Cai et al 2016 Nature Communications** media coverage: UD press release [article](#)
- 2016 Interviewed and quoted in “[Coral researchers look for ways to connect science](#)” by Pola Lem, in ClimateWire, 7 April
- 2016 Interviewed and quoted in “[Shocking Before-and-After Photos of the World’s Coral Bleaching Catastrophe](#)” by Claudia Geib in Atlas Obscura, 19 April
- 2016 Interviewed and quoted in “[What we can learn from watching video of coral lose its color](#)” by Joseph Dussault, Christian Science Monitor , 18 Aug
- 2016 Interviewed on Press Play with Madeleine Brand (KCRW in Los Angeles, CA) about “[Is the](#)

- [Great Barrier Reef really dead?](#)” 16 Oct
- 2016 Interviewed by Eric Niller and quoted in “[Climate Scientists Fear Trump Budget Cuts and Wonder What He Really Believes](#)” Seeker 7 Dec
- 2017 Interviewed by Eva Botkin-Kowacki and quoted in “[From coral sperm banks to climate action: What’s best to save reefs?](#)” Christian Science Monitor, July
- 2017 **Grottoli AAAS Fellow** media coverage: AAAS 2017 Fellows [announcement](#) ; OSU [announcement](#) ; OSU Press release [article](#); School of Earth Sciences [announcement](#) ;
- 2017 Interviewed and quoted in “[Can ‘super-corals’ save the reefs?](#)” by Eva Botkin-Kowacki in Christian Science Monitor, Dec
- 2018 **Grottoli et al (2018) PLoS ONE** media coverage:  
 OSU press release [article](#) ; School of Earth Sciences News [article](#)  
 Selected additional press coverage: Newswise [article](#) ; EurekaAlert! [article](#) ; PhysOrg [article](#) ; Science Daily [article](#) ; R&D Magazine – Online [article](#) ; ScienceNewsline [article](#) ; Environment Guru [article](#) ; Ocean Sentry [article](#) ; Lab Manager Magazine [article](#); Global News Connect [article](#) ; WorldScience [article](#) ; Ocean acidification News stream [article](#) ; Microbiome Digest [article](#) ; Science360News Picture of the Day [article](#)
- 2018 Interviewed and quoted in “[Even Corals Have Microbiomes](#)” by Jason G. Goldman in Hakai Magazine, February
- 2018 Interviewed and quoted in “[Can Coral Microbes Protect Reefs from Climate Change?](#)” by Amelia Urry in Oceans Deeply, March
- 2018 Interviewed and quoted in “[There’s still time for us to save the Great Barrier Reef](#)” by Amelia Urry in Popular Science, April
- 2018 Interviewed by 6<sup>th</sup> Grader Alexios Dulcinea on corals and climate change
- 2019 Interviewed for Batelle Podcast on “[Ocean Pollution, Coral Bleaching, and the Great Pacific Garbage Patch](#)” by Samuel Bodary
- 2019 Interviewed and quoted in “[Science shutdown an experiment in fear, frustration](#)” by Michael Doyle in ENews, Jan
- 2019 Interviewed and featured in “[Coral Microbiomes Offer Clues for Resilience and Conservation](#)” by Emily Portecorvo, EOS, Jan
- 2019 Interviewed and featured in “[Earth sciences professor puts Ohio State on the map of coral research](#)” by Jimmy Bingman, The Lantern, 13 March
- 2019 Grottoli AG, 2019 [Coral Bleaching Research Coordination Network Workshop](#), School of Earth Sciences News Notes, June
- 2019 College of Arts and Sciences at OSU News & Updates “[Coral bleaching research coordination network at Ohio State](#)” 10 July
- 2019 College of Arts and Sciences at OSU College News “[Network of global coral researchers converges at Ohio State](#)” 12 September
- 2019 **Baums et al 2019 Ecological Applications** media coverage:  
 OSU Press release [article](#) ; Penn State Press release [article](#) ; Secore Press release [article](#)  
 Featured in: [7 Bold Ways Scientists are Saving Coral Reefs](#), The Hill
- 2019 Interviewed and quoted in “[The world’s coral reefs are dying. Shedd scientists in the Bahamas are searching for a chance for their survival.](#)” by Steve Johnson, Chicago Tribune, 12 November
- 2020 Interviewed by book journalist Kristin Ohlson for her chapter on partnerships in the ocean in her book “Sweet in Tooth and Claw: the hidden cooperation and connection in nature”, 30 March
- 2020 Interviewed and quoted in “[The super-corals of the Red Sea.](#)” by Sunny Fitzgerald, BBC Future Planet, 8 April

- 2020 Featured in School of Earth Sciences Alumni News and Notes “[Professor Andrea Grottoli Awarded 2020-2021 U.S. Fulbright Award to France](#)” April
- 2020 Research publication featured in School of Earth Sciences Alumni News and Notes “[Grottoli group publishes new work on coral experiments](#)” May
- 2020 Interviewed and featured in “[Expert interview with Prof. Andréa Grottoli](#)” by EcoMagazine, pp8-9, June
- 2020 Grottoli featured in Ohio State Alumni Magazine “[Beauty is all around](#)” by Laura Newpoff, Fall
- 2020 Grottoli featured in SES Alumni News Notes (October) “[Prof Grottoli featured in OSU alumni magazine](#)”
- 2020 USGS press release “[SPCMSC coral team and Ohio State researchers travel to the Florida Keys to complete coral growth study](#)”, 21 Oct
- 2020 The Ohio State University School of Earth Sciences #MeetTheScientistMonday featuring [Dr. Andrea Grottoli](#)
- 2020 ***Grottoli et al 2020 Ecological Applications*** media coverage:  
 OSU Press release [article](#) ; University of NY at Buffalo press release [article](#) ;  
 Penn State press release [article](#)
- 2020 Grottoli featured in SES Alumni News Notes (November) “[Professor Andrea Grottoli and her team conduct fieldwork in the Florida Keys to study endangered Elkhorn corals](#)”
- 2020 Grottoli work with the International Coral Reef Society Press Release “[12 Things You can Do to Help Save Coral Reefs](#)” by Laura Arenschiold, 15 Oct
- 2020 Grottoli featured in SES Alumni News Notes (December) “[Prof Grottoli Studies Elkhorn Corals in the Dry Tortugas](#)”
- 2021 Grottoli interviewed by Ramin Skibba and quoted in “[Gardener of the Sea](#)” Pomona College Magazine 23 March 2021
- 2021 Interviewed by Sara Harrison and quoted in “[This Evolutionary Gift May Protect Coral From Climate Change](#)” Wired Magazine 24 May 2021
- 2021 Grottoli featured in “[Raising our Voice for Coral Reefs on World Oceans Day](#)”
- 2021 Grottoli co-signer of letter to UNESCO asking for more protection for the Great Barrier Reef, 1 July. [Press release](#) and [letter](#)
- 2021 [Grottoli interviewed](#) by ZDF German television (16 July) regarding the upcoming International Coral Reef Symposium and the Science to Policy Paper. (starts at 11:42min)
- 2021 [Grottoli interviewed](#) by Anna Berkhout at German Public Broadcast television, 19 July regarding upcoming International Coral Reef Symposium.
- 2021 Interviewed by Susi Weichselbaumer for German Public Radio, 21 July
- 2021 ***Knowlton, Grottoli et al (2021)*** media coverage:  
 OSU press release [article](#) ; ICRI Press release [article](#) ; The Conversation [article](#)
- 2021 Grottoli interviewed by Aubrey White in “[Grottoli continues coral research in Mediterranean](#)” for OSU Office of International Affairs, 10 Dec
- 2021 Grottoli featured in SES Alumni News and Notes “[Grottoli continues coral research in Mediterranean](#)” Dec 2021
- 2022 ***McLachlan et al (2022) Scientific Reports*** media coverage:  
 Ohio State [press release](#)                      Oregon State [press release](#)  
 University of Hawaii [press release](#)              Honolulu Star Advisor [article](#)  
 National Geographic [news Story](#)              NBCNews [story](#)  
 Yahoo News [article](#)                                  Nature Research [highlights](#)  
 Ecowatch [article](#)                                      Earth.com [article](#)  
 Zenger News [article](#)                                  Good News Networks [article](#)



- SES News and Notes [article](#)  
Scientific American Climate Change 60-second Science [podcast](#)  
Wikipedia “2022 in Climate Change” natural events and phenomena [entry](#)  
Altmetrics of [330](#) and counting: top 5% of all research output scored by Altmetrics,  
99<sup>th</sup> percentile of studies that came out at the same time
- 2022 [van Woesik et al \(2022\)](#) Global Change Biology media coverage:  
Florida Institute of Technology [press release](#)  
Ohio State University [press release](#)  
SES News and Notes [article](#)
- 2022 Grottoli interviewed by Michele Redmon from WeatherFlow about coral restoration and mesoscale sanctuaries, 14 June
- 2022 Grottoli interviewed by Kai Niklasch for ZDF German television about the 15<sup>th</sup> ICRS Symposium, 1 July
- 2022 Grottoli interviewed by Radio Bremen TV about the 15<sup>th</sup> ICRS Symposium at the Coral Reef photo exhibit at the House of Science Bremen, 3 July
- 2022 Grottoli panelist for 15<sup>th</sup> ICRS Symposium press conference, 5 July
- 2022 Grottoli interviewed by Rebecca Hahn for the German newspaper Frankfurter Allgemeine Sonntagszeitung “Kümmert euch alle um die Koralle” 10 July
- 2022 Grottoli research featured in “[Coral Resilience: Determining the fate of coral in a changing climate](#)” by Lori Balster in Environmental Monitor, 5 Sept
- 2022 Grottoli interviewed by undergraduate student Morgan Vincent from Kent State University as a coral reef expert 10 October
- 2022 Grottoli oceanography class featured in SES Alumni News and Notes [Advanced Oceanography Class Discovers the Ocean in Ohio](#), Dec
- 2023 Grottoli hosts [Columbus School for Girls students meet with Bownocker speaker Dr. Lindy Elkins-Tanton](#) in SES Alumni News and Notes, Feb
- 2023 Grottoli featured for Pacifica Radio [REEF Roundup Podcast](#) by Graham Petterson in “[Science or Policy? No, we need both! With Dr. Andrea Grottoli](#)” S2E9, Feb
- 2023 Grottoli interviewed by Samantha Baxter for “Coral resilience – determining the fate of coral in a changing climate” in [Environmental Monitor](#), pp 46-47, Winter
- 2023 Grottoli interviewed by Ocean Visions for [Ocean Visions Summit blog](#), May
- 2023 [Chapron et al \(2023\)](#) *Nature Communications Earth & Environment* media coverage :  
Ohio State University [press release](#)  
USGS [press release](#)
- 2023 Grottoli interviewed by Trista Battiatia, Cumberland Regional High School, New Jersey, about coral reefs, coral bleaching, and climate change. 1 November
- 2023 Grottoli on-camera interviewed by OSU Marketing and Communications for Associate Press for the Climate Control Conference. 14 November
- 2024 Grottoli interviewed by Whitefish Bay Schools high school students Sophia Lozanova on coral bleaching. 3 March

## REVIEWER FOR

### *Funding agencies*

National Science Foundation (Division of Ocean Sciences)  
National Ocean and Atmospheric Association (NOAA)  
NERC – Natural Environment Research Council of the UK

Caribbean Marine Research Center, a NOAA/NURC program  
BARD, the United States - Israel Binational Agricultural Research & Development Fund  
Netherlands Organization for Scientific Research (NWO) Climate Variability Program  
The Leverhulme Trust  
OITI Report (NSF, ONR)

### **Journals**

Nature Climate Change Science (AAAS)	Proceedings of the National Academy of Sciences (PNAS) Geophysical Research Letters
Nature Climate Change	Frontiers in Marine Science
Nature Communications	Limnology and Oceanography
Science Advances	Journal of Experimental Marine Biology and Ecology
Scientific Reports	Geochimica et Cosmochimica Acta
Global Change Biology	Journal of Geophysical Research
ISME Journal	Marine and Freshwater Behavior and Physiology
Marine Biology	Geochemistry, Geophysics, Geosystems
Chemical Geology	Marine Ecology Progress Series
Paleoceanography	Estuarine, Coastal and Shelf Science
Biological Reviews	Palaeogeography, Palaeoclimatology, Palaeoecology
Current Biology	Geology
PLoS ONE	Palaios
Coral Reefs	

### **COLLABORATORS (in addition to co-authors)**

Jean-Pierre Gattuso, Nuria Texeido, Steeve Comeau, Chloe Carbonne

### **MAJOR STUDENT OR POSTDOC ADVISOR**

#### **PhD students**

- 1) **Shannon Dixon** (PhD in progress)  
Dissertation: *Enhanced zooplankton feeding as a tool for increasing coral growth and survival in a changing world*  
Awards: OSU Enrichment Graduate Entrance Fellowship, Friends of Orton Hall
- 2) **Ann Marie Hulver** (PhD candidate, in progress)  
Dissertation: *Climate change resilience in Mediterranean and tropical corals*  
Awards: WHOI NOSAMS graduate student research award, CBRCN Early Career Award, Friends of Orton Hall, OSU Presidential Fellowship
- 3) **Rowan McLachlan** (PhD, 2021)  
Dissertation: *Adaptation and acclimatization in Hawaiian corals to global climate change*  
Awards: Distinguished Senior Graduate Student Award (Spieker Book Award), Scottish International Education Trust, OSU Sigma Xi, National Sigma Xi, Friends of Orton Hall, Sutherland-Page Trust Scholarship, CBRCN Early Career Training Program Award  
Currently: Postdoc at Oregon State University
- 4) **Kerri Dobson** (PhD, 2021)  
Dissertation: *Multiple stressor effects on coral physiology and biogeochemistry*  
Awards: National Sigma Xi, Alumni Grants for Graduate Research and Scholarship, Friends of

Orton Hall (twice), Sea Grant John A Knauss Marine Policy Fellow  
Currently: Teaching Fellow in Marine Biology, University of Southampton

- 5) **James Price** (PhD, 2020)  
Dissertation: *Influence of Environment and Climate Change on Coral-associated Microbial Communities and Trophic Strategies*  
Awards: OSU first year graduate fellowship, ISRS Graduate Scholarship, Geological Society of America GSR Award, Friends of Orton Hall (twice), OSU Presidential Fellowship, CBRCN Early Career Training Program Award, Sea Grant John A Knauss Marine Policy Fellow  
Currently: Program officer for Gulf Research Program's Offshore Energy Safety Board
- 6) **Geoffrey Dipre** (PhD 2019)  
Dissertation: *A reconstruction of quaternary Arctic environments using a multi-proxy analysis of Arctic Ocean sediment cores*  
Awards: University Fellow, AMS Summer Policy Colloquium, Rick Toracinta Graduate Scholarship, Sea Grant John A. Knauss Marine Policy Fellow
- 7) **Verena Schoepf** (PhD 2013)  
Dissertation: *Physiology and Biogeochemistry of Corals Subjected to Repeat Bleaching and Combined Ocean Acidification and Warming*  
Awards: Ohio State University Presidential Fellow, Lee Fund Fellow, Rotary Club Innsbruck Research Fellowship, Mayer Travel Fund,  
Currently: Assistant Professor and MacGillavry Fellow at the Institute for Biodiversity and Ecosystem Dynamics at the University of Amsterdam
- 8) **Stephen Levas** (PhD 2012)  
Dissertation: *Biochemistry and Physiology of Bleached and Recovering Hawaiian and Caribbean Corals*  
Awards: National Science Foundation East Asia and Pacific Summer Institutes Program Fellow, Ford Foundation Minority Scholarship Fellow, Minorities Striving and Pursuing Higher Degrees of Success in Earth System Science Scholar  
Currently: Associate Professor, University of Wisconsin – Whitewater
- 9) **Branwen Williams** (PhD 2009)  
Dissertation: *Biogeochemistry of Alcyonacean and Antipatharian Corals in the Western Pacific Warm Pool*  
Awards: National Science and Engineers of Canada Graduate Fellow  
Currently: Professor (tenured) at Claremont McKenna College
- 10) **Ryan P. Moyer** (PhD, 2008)  
Dissertation: *Carbon Isotopes and Trace Elements in Small Mountainous Rivers and Coastal Coral Skeletons in Puerto Rico.*  
Awards: Ohio State University Presidential Fellow, USGS Mendenhall Postdoctoral Fellow, St. Petersburg, FL  
Currently: Senior Manager, Blue Carbon, Terra Carbon LLC
- 11) **Kathryn A. Matthews** (PhD, 2007)  
Dissertation: *Cadmium in Coral Skeleton: Natural Variability and In Situ Calibration.*  
Positions: Postdoctoral fellow at the Los Alamos National Laboratory, NM (2007-9), Congressional Postdoctoral Fellow, Washington, DC (2009-2010)

Currently: Deputy Chief Scientist at Oceana

12) **Lisa J. Rodrigues** (PhD, 2005)

Dissertation: *Physiology and Biogeochemistry of Bleached and Recovering Corals from Hawaii*

Positions: Postdoctoral Fellow, Department of Biology, Villanova University (2005-2008)

Currently: Professor (tenured), Villanova University

**MS students**

1) **Scott Kelsey** (M.S. 2016)

Thesis: *Impact of land use on headwater stream organic and inorganic carbon export in a temperate Midwestern experimental watershed*

Currently: laboratory technician at Ohio State University

2) **Justin Baumann** (M.S. 2013)

Thesis: *The Effects of Elevated Temperature Stress on the Acquisition and Allocation of Carbon to Lipids in Hawaiian Corals*

Currently: Visiting Assistant Professor at Bowdoin College

3) **Abbey E. Chrystal** (M.S. 2008)

Thesis: *Exploring Linear Extension and Stable Isotopes ( $\delta^{18}O$ ,  $\delta^{13}C$ ) as Proxies for Coral Bleaching in *Porites lobata*.*

4) **Ruth Adler** (M.S. 2008)

Thesis: *The first Late Quaternary sediment record from the western Arctic Ocean with a true millennial resolution: HOTRAX core HLY0503-08JPC, Mendeleev Ridge*

Awards: National Science Foundation GK-12 Graduate Fellow

Currently: Adjunct professor at Case Western University

5) **Henry Chun-Yi Wu** (MES, 2004)

Thesis: *Stable Isotope Records from Western Pacific Corals*

Current: Research Scientist and Working Group Leader at the Leibniz Center for Tropical Marine Research (ZMT)

**Undergraduates (senior thesis)**

1) **Emma van Buren** (BS SES in progress)

Thesis: *Stable isotopic signature of coral provided enhanced zooplankton with UZELA*

2) **Tony Caputo** (BS SES in progress, co-advised with Babcock)

Thesis: *Live reef video display at Orton Geological Museum*

Awards: OSU Summer 2023 Career Accelerator Fund

3) **Caroline McCoy** (BS Chemistry in progress)

Thesis: *Biomass and pigmentation of corals provided enhanced zooplankton with UZELA*

4) **Mary Raker** (BS SENR in progress)

Thesis: *Growth of corals provided enhanced zooplankton with UZELA*

5) **Marissa Johnston** (BS Zoology in progress)

Thesis: *Biomass and pigmentation of corals provided enhanced zooplankton with UZELA*

6) **Jacob Welter** (BS ENG in progress)

Thesis: *Physiological responses of the resilient coral Stylophora pistillata to chronic elevated temperature*

Awards: Denman Undergraduate Research Forum winner (3<sup>rd</sup> place, Earth and Beyond category).

7) **Zoe Watson** (BS SES, 2022)

Thesis: *Effect of temperature and ocean acidification on the relationship between chlorophyll a and Symbiodinacea density in corals*

8) **Corbin Lanker** (BS SES, Research Distinction, 2022)

Thesis: *Synthesis of publicly available carbonate chemistry data of the Mediterranean Sea*

9) **Sam Nortz** (BS BIOCHEM, Research Distinction, 2022)

Thesis: *Effect of pH on carbohydrate concentrations of the Mediterranean coral Cladocora*

10) **Shannon Dixon** (BS SES and FAES, Research Distinction, 2021)

Thesis: *Effect of chronic elevated temperature and acidity on coral endosymbiotic algal density*

Awards: Honors and Scholars Enrichment Grant, 1<sup>st</sup> Place in Earth and Beyond 27th Richard J. and Martha D. Denman Undergraduate Research Forum, CFAES Distinguished Senior, FABE Outstanding Senior Award, OSU Graduate Enrichment Fellowship

11) **Hailey Hayes** (BS SENR, 2020)

Thesis: *Natural variability in the contribution of heterotrophic carbon to tissues of Pocillopora corals*

Awards: Fletcher Scholarship, Food and Water Watch Fellowship

12) **Elton Nguyen** (BS EEOB, 2020)

Thesis: *Development of an in vitro culture technique of Tridacna deresa clams*

Awards: OSU Undergraduate Student Academic Enrichment Grant, ASC Undergraduate Research Scholarship, OSU Undergraduate Research Apprenticeship Program (URAP), Second Year Transformational Experience Program Fellowship (STEP)

13) **Claire Juracka** (BS SENR Honors, Research Distinction, 2019)

Thesis: *The effects of enhanced feeding on the endosymbiotic algal cell density of bleached Montipora capitata corals in an acidified ocean*

Awards: Grottoli Undergrad Hoover Foundation Internship, OSU Undergraduate Research Apprenticeship Program (URAP)

Currently: MS Student at Northwestern University, Master of Science in Energy and Sustainability

14) **Andrea Wertz** (BS Microbiology, 2019)

Thesis: *Effect of bleaching and ocean acidification on coral pigmentation in Porites compressa corals.*

Awards: Denman Sustainability Institute Award, Grottoli Undergrad Hoover Foundation Internship

15) **Alexandra Smith** (BS Earth Science, Research Distinction, 2019)

Thesis: *Natural variability in the contribution of heterotrophic carbon to tissues of Hawaiian corals*

Awards: SURE scholar, Office of Energy and Environment Undergrad Research Grant, Undergraduate Student Government Academic Enrichment Grant, Kathryn Sullivan Scholarship Award, ASC Honors Undergraduate Research Scholarship, Meyer's Undergrad Summer Research Fellowship, Susie L Shipley Undergraduate Scholarship, Ohio EPA Environmental Science and Engineering Scholarship, Denman UG Research Forum winner, 3-Minute Thesis Competition First Place Winner

- 16) **Margaret Otto** (BEng, 2019)  
Thesis: *Modeling pH and temperature manipulations in situ*  
Awards: STEP scholar, Grottoli Undergrad Hoover Foundation Internship  
Currently: MS in Biosystem Engineering at Auburn University (starting fall 2024)
- 17) **Sarah Solomon** (BS EEOB, 2018)  
Thesis: *Lipid class composition of annually bleached Caribbean corals*  
Awards: Grottoli Undergrad Hoover Foundation Internship (twice), ASC Undergrad Research Scholarship, National Sigma Xi, OSU Honors and Scholars Enrichment Grant, Denman UG Research Forum winner, NMS Science Forum Best Poster winner, Student research blog  
<https://ugresearchtheohiostateuniversity.wordpress.com/2018/01/18/climate-change-sarah-solomon/>  
Currently: PhD student at the University of Amsterdam
- 18) **John Armstrong** (BS EEOB, 2018)  
Thesis: *Carbon budgets of bleached Hawaiian corals recovering under ocean acidification conditions*  
Currently: MA student at Georgetown University
- 19) **Chloe Criswell** (BEng, 2018)  
Thesis: *Dissipation of acidified water on a coral reef*
- 20) **Katherine Giesy** (BS Zoology, Research Distinction, 2017)  
Thesis: *Effect of pH and temperature on carbon budgets of the Hawaiian corals Porites lobata*  
Currently: graduate student at U-Miami
- 21) **Alec Moore** (BS EEOB, minor SES, 2017, Research Distinction)  
Thesis: *Variability in Hawaiian coral across naturally occurring gradients in temperature, pCO<sub>2</sub>, and flow.*  
Awards: SURE Scholar, URO Mayers Summer Research Scholar, Grottoli Undergrad Hoover Foundation Internship, Ohio EPA Scholarship, OSU Sigma Xi, Arts and Sciences Undergraduate Research Scholarship, winner of the Denmen Undergraduate Research Forum (3<sup>rd</sup> place) and the Natural & Mathematical Sciences Undergrad Research Forum
- 22) **Annce Kadri** (BS Environmental Science, 2016)  
Thesis: *Recovery of coral biomass following bleaching under ocean acidification conditions*  
Awards: OSU Research Scholars Award, SURE scholar  
Currently: dental school student
- 23) **Casey Saup** (BS Earth Science, 2015)  
Thesis: *Physiological and isotopic responses of Stylophora pistillata to future coastal ocean conditions*  
Awards: NMS Undergraduate Research winner, -Denman Undergraduate Research honorable mention, SURE scholar  
Currently: PhD student at OSU
- 24) **Micheal McBride** (BS Biology, 2014)  
Thesis: *Effect of Repeat Bleaching Stress on the Stable Isotopes of Porites astreoides Corals*  
Currently: Ohio University Heritage College of Osteopathic Medicine
- 25) **Tyler Liston** (BS Earth Science, 2014)  
Thesis: *Interactive Effects of Temperature, Nutrients, and Ocean Acidification on Coral Biomass*  
Awards: NMS Undergraduate Research Forum winner



- 26) **Colin Gearing** (BS Earth Science, 2013)  
Thesis: *Particulate organic fluxes in Acropora millepora and Turbinaria reniformis at elevated temperature and pCO<sub>2</sub>*
- 27) **Sarah Starkey** (BS Geology, 2012)  
Thesis: *Sources of carbon to the skeleton of the mesophotic coral Leptoseris hawaiiensis*  
Awards: SURE scholar
- 28) **Maximillian Ringwald** (BS Geology, 2012)  
Thesis: *Denaturing Gradient Gel Electrophoresis Analysis of Microbial Community Variation in Bleached and Non-bleached Montastraea faveolata*  
Awards: SURE Scholar
- 29) **Dana Borg** (Gava) (BS Geology, Honors, 2011)  
Thesis: *Paleoceanography of sclerospoges from elemental signatures*  
Awards: SURE Scholar, ASLO undergraduate research poster winner
- 30) **Justin Baumann** (BS Zoology/ BA Geology, 2011)  
Thesis: *The effects of single and repeat bleaching on photosynthesis, respiration, and feeding in three species of Caribbean coral*  
Awards: SURE Scholar, NMS Undergraduate Research Forum winner  
Currently: postdoc at UNC-Chapel Hill
- 31) **Teresa Huey** (Sanders) (BS SENR, 2011)  
Thesis: *Effect of Land Use on the Age and Isotopic Composition of Dissolved and Particulate Carbon in Headwater Streams*  
Awards: SURE Scholar  
Currently: Nurse practitioner
- 32) **Chris Paver** (BS Earth Science, 2007)  
Thesis: *Temporal and Spatial Natural Variability of the  $\delta^{13}C$  of Dissolved Inorganic Carbon in Seawater*  
Currently: employed at NOAA
- 33) **James E. Palardy** (BA Biology, 2004)  
Thesis: *The Effect of Morphology, Polyp Size, Depth and Temperature on Feeding in Three Species of Panamanian Corals*. Published as Palardy et al. (2005)  
Currently: program officer at the Pew Charitable Trust
- 34) **Lillian Bloch** (BA 2004)  
Thesis: *Developing a Method for Black Carbon Extraction from Coral and Application to an Australian Coral Core*.
- 35) **Christopher Malachowski** (BA 2004)  
Thesis: *Effects of River Discharge on Coral Reefs in Puerto Rico and the Relationship to Land Use/Land Cover*.

### **Postdocs**

- 1) **Leila Chapron** (2020- 2021)  
Project: Biological and oceanographic processes impacting the persistence of the threatened *Acropora palmata* coral in Dry Tortugas National Park (CESU-USGS funded project to Grottoli)  
Awards: Coral Bleaching RCN Early Career Training Award

Currently: Research Engineer at Plastic@Sea

- 2) **Stephen Levas** (2012-2013)  
Project: *Effect of ocean acidification and warming on corals* (NSF-funded project of Grottoli)  
Currently: Associate Professor (tenured) University of Wisconsin – Whitewater
- 3) **Yasuaki Tanaka** (2012-2013)  
Project: *The allocation of nitrate-derived N to the zooxanthellae, host tissue, and carbonate skeleton of Montipora digitata and Porites cylindrica, and subsequent changes in the  $\delta^{13}C$  of each fraction.*  
Awards: Japan Society Research Fellowships for Young Scientist  
Currently: Assistant Professor at University Brunei Darussalam
- 4) **Branwen Williams** (2009)  
Project: *Paleoceanography of the Pacific Warm Pool*  
Currently: Associate Professor (tenured) at Claremont McKenna College
- 5) **Adam D. Hughes** (2006-2008)  
Project: *Acquisition, Allocation, and Utilization of Carbon in Bleached and Recovering Corals* (NSF-funded project, Grottoli lead PI)  
Currently: Senior Lecturer, The Scottish Association for Marine Science Dunstaffnage Marine Laboratory

#### **Visiting Scientist**

- 1) **Marji Puotinen** (2012 - 2013), University of Wollagong  
Project: Effect of hurricane-produced cool wakes on coral reefs

#### **Faculty Mentees**

- 1) **Melisa Diaz**, Assistant Professor in SES (2024 – present)
- 2) **Elizabeth Griffith**, Associate Professor in SES (2017 – present)
- 3) **Jennifer Hellman**, Assistant Professor in EEOB (2024 – present)
- 4) **Audrey Sawyer**, Associate Professor in SES (2014 – 2021)
- 5) **Michael Wilkins**, Assistant Professor in SES (2013 – 2018)

#### **STUDENT COMMITTEE MEMBER (in addition to Major students above)**

- 1) **Megan O'Quin** (MS in progress, Ohio State University) *Physiology and energetics of resilient coral-dinoflagellate communities*
- 2) **Elise Keister** (PhD 2023, U Alabama) *Physiology and energetics of resilient coral-dinoflagellate communities*
- 3) **Alexa Regnier** (MS 2023, Ohio State University) *Impact of the Miocene Carbonate Crash (13-8 Ma) on Bulk Carbonate  $\delta^{44/40}Ca$  in the Eastern Equatorial Pacific*
- 4) **Chloe Carbonne** (PhD 2022, Sorbonne University) *Rôle of environmental variability on the response of Mediterranean corals to global change*
- 5) **Nia Simone Walker** (PhD 2022, Stanford University, Hopkins Marine Lab) *Linking heat stress resistance and recovery in reef-building corals*
- 6) **Abraham Abellana** (BA Biomedical Art 2020, Cleveland Institute of Art)
- 7) **Samantha Carter** (PhD 2020, Ohio State University) *Improving our understanding of the marine barium cycle and constructing a new archive of erosion and sediment transport*
- 8) **Amber Bellamy** (PhD 2016, Ohio State University) *Contributions of allochthonous and aged*

*organic matter to the diet and nutrition of macroinvertebrates*

- 9) **Donald Permana** (PhD 2015, Ohio State University) *Reconstructing History of Temperature and Net Accumulation based on Papua Ice-Cores and Its Implication on Climate Variability over Indonesia*
- 10) **Alvaro Fernandez** (PhD 2015, Tulane University) *Isotopic proxies of continental and oceanic climate* (currently postdoc in Switzerland)
- 11) **Karl Philippoff** (MS 2014, Ohio State University) *A climate history recovered from the Zangser Glacier, west-central Tibetan Plateau.*
- 12) **Jesse Filburn** (PhD 2013, Ohio State University) *An ecological approach to feed management in fish rearing ponds.*
- 13) **Deborah Leslie** (PhD student 2011-2012, Ohio State University) *Applying Stable Isotopes,  $\delta^{11}\text{B}$ ,  $\delta^{18}\text{O}$ , and  $\delta\text{D}$ , in Geochemical and Hydrological Investigations*
- 14) **Kathryn Lang** (BS 2012 senior thesis, Ohio State University) *Hypoxia as a mediator of food web interactions and energy flow in reservoir ecosystems.*
- 15) **Donald Permana** (MS 2011, Ohio State University) *Reconstructing History of Temperature and Net Accumulation based on Papua Ice-Cores and Its Implication on Climate Variability over Indonesia*
- 16) **Annette Trierweiler** (MS 2010, Ohio State University) *Interaction of Landslides and Land Use Changes on Fluvial Carbon Transport*
- 17) **Henry Wu** (PhD 2010 at SUNY-Albany) *Assessing replicated coral trace element (Sr/Ca and Mg/Ca) variability and skeletal growth records from the tropical Pacific*
- 18) **Natalie Kehrwald** (PhD 2009, Ohio State University) *Low-latitude ice cores and freshwater availability.*
- 19) **Seth Young** (PhD 2007, Ohio State University) *A chemostratigraphic investigation of the late Ordovician greenhouse to icehouse transition: oceanographic, climatic, and tectonic implications.*
- 20) **Suzanna Richter** (PhD 2006, University of Pennsylvania) *Continental-Scale Patterns in Wood Cellulose  $\delta^{18}\text{O}$ : Implications for Paleoclimate Reconstruction*

## WORK-STUDY, INTERNSHIP, and VOLUNTEER STUDENTS

- |   |  |
|---|--|
| 1) Carlos Juarez (1999 – 2000)                          | 2) James Palardy (2001 – 2004)           |
| 3) Lillian Bloch (2002 - 2003)                          | 4) Lauren Tang (2002 - 2003)             |
| 5) Shayna Higa (2002 - 2003)                            | 6) Leigh Seeleman (2003 – 2004)          |
| 7) Emily Young (2003)                                   | 8) Christopher Malachowski (2003 – 2004) |
| 9) Haley Wolfgruber (2004)                              | 10) Lindsey Swiacki (2004 – 2005)        |
| 11) Chris Paver (2005 – 2007)                           | 12) Patrick Bills (2007)                 |
| 13) Rachel Michelli (2007)                              | 14) Zachary Rosenbloom (2007)            |
| 15) Christine Andrews (2007)                            | 16) Louis Boucher (2007)                 |
| 17) Frances Lugo (2007-2008)                            | 18) Scott Himes (2007 - 2008)            |
| 19) Brad Hull (2007 - 2008)                             | 20) Pat Burns (2007-2008)                |
| 21) Lei-Wei Hung (2008-2009)                            | 22) Julie Ditkof (2009)                  |
| 23) Jane Marino (2009-2010)                             | 24) Lindy Rauchenstein (2009-2010)       |
| 25) Shaun Bartels (2010)                                | 26) Teresa Huey (2008 - 2011)            |
| 27) Justin Bauman (2009- 2011)                          | 28) Mikelis Berzins (2011)               |
| 29) Mohammed Munster (2011)                             | 30) Mark Ferrito (2010 – 2011)           |
| 31) Maximillian Ringwald (2011 – 2012)                  | 32) Chrissy Zerda (2011 – 2012)          |
| 33) Alexander Singer (high school intern) (2011 – 2012) | 34) Jordan Scheuerman (SURE - 2012)      |
| 35) Elizabeth Zebrowski (2011 – 2012)                   | 36) Megan Shortridge (2012 – 2013)       |

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|--|---|
| 37) Michael McBride (2012 – 2014)        | 38) Samantha Blackhurst (2012 – 2014)   |
| 39) Tyler Liston (2013 – 2014)           | 40) Colin Gearing (2013 – 2014)         |
| 41) Megan Dudte (2014)                   | 42) Spencer Palombit (2014)             |
| 43) Malloree Hagerty (2014 - 2015)       | 44) Casey Saup (2013 – 2015)            |
| 45) Annce Kadri (2014 – 2016)            | 46) Maddie Rokosh (2015)                |
| 47) Andrew Huber (2016)                  | 48) Katiri Snyder (2015 – 2016)         |
| 49) Alec Moore (2015 – 2017)             | 50) Emily Sambuco (2015 – 2017)         |
| 51) Mathias Wagner (2016 – 2017)         | 52) Francesca Hawkes (2017)             |
| 53) Lydia Mullins (2017)                 | 54) Chloe Criswell (2016 – 2018)        |
| 55) John Armstrong (2016 – 2018)         | 56) Katherine Giesy (2016 – 2018)       |
| 57) Jordan Walters (STEP 2017 – 2018)    | 58) Colin Mortemore (STEP 2017 – 2018)  |
| 59) Jackie Altschuler (STEP 2017 – 2018) | 60) Margaret Otto (STEP 2016 – 2019)    |
| 61) Sarah Solomon (2015 – 2018)          | 62) Alexandra Smith (SURE 2017 – 2019)  |
| 63) Andrea Wertz (2017 – 2019)           | 64) Ester Kang (2018 - 2019)            |
| 65) Adrianna Arribas (STEP 2018 – 2020)  | 66) Kristen Rockwell (URAP 2018 – 2020) |
| 67) Claire Juracka (Honors 2018 – 2020)  | 68) Emma Kline (2018 – 2019)            |
| 69) Hailey Hayes (2017 – 2020)           | 70) Monica Locatis (STEP 2018 – 2019)   |
| 71) Elton Nguyen (2018 – 2020)           | 72) Barbara Nainiger (2019)             |
| 73) Luke Baily (2019)                    | 74) Ysabela Noggle (2019- 2020)         |
| 75) Marissa Moran (2019-2020)            | 76) Elliot O’flynn (2019)               |
| 77) Samantha Lannon (2019)               | 78) Kaleb Ryan (2019)                   |
| 79) Shannon Dixon (2019 - 2022)          | 80) Sam Nortz (2021 – 2022)             |
| 81) Zoe Watson (2021 – 2023)             | 82) Corbin Lanker (2020 – 2022)         |
| 83) Lain Weaver (2022 – 2023)            | 84) Austin Krupar (2022 – 2023)         |
| 85) Jacob Welter (2022 – present)        | 86) Carly Schafer (2023)                |
| 88) Mary Raker (2023 – present)          | 89) Emma van Buren (2023 – present)     |
| 90) Caroline McCoy (2023 – present)      | 91) Olivia Reed (2023 – present)        |
| 93) Marissa Johnston (2023 – present)    | 94) Addie Flowers (2023 – present)      |
| 95) Tony Caputo (2022 – present)         | 96)                                     |

### **TOTAL NUMBER OF STUDENTS ADVISED**

**Graduate Student PhD Dissertation Major Advisor: 12**

**Graduate Student Masters Major Advisor: 5**

**Graduate Student Committee Member (not as Major Advisor): 17**

**Total graduate students advised: 34**

**Undergraduate senior thesis students advised: 33**

**Undergraduate Student Committee Member (not as Major Advisor): 2**

**Total undergraduate students advised: 35**

**Total undergraduate work-study, interns, and volunteers: 95**

**Total Postdocs advised: 5**

**Total Faculty Mentees: 3**