Rhian G. Waller, Ph.D.

Senior Lecturer/Associate Professor

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Education

Southampton Oceanography Centre

Ph.D. 2004

Thesis – Reproductive Ecology of Deep-Water Scleractinians – Prof. Paul Tyler, Prof. John Gage
University of Wales, Aberystwyth Marine and Freshwater Biology B.Sc.(hons) 20

Thesis – Environmental Tolerances in the Beadlet Anemone, Actinia equina – Dr. Simon Creasey

Appointments & Positions Held

2022 – Present	Senior Lecturer, University of Gothenburg Tjärnö Marine Laboratory, Sweden
2020 – 2022	Associate Professor (with tenure), School of Marine Sciences, University of Maine, USA
2015 – 2020	Associate Professor (tenure track), School of Marine Sciences, University of Maine, USA
2013 - 2015	Associate Research Professor, School of Marine Sciences, University of Maine, USA
2011 - 2013	Assistant Research Professor, School of Marine Sciences, University of Maine, USA
2007 – 2010	Assistant Researcher (SOEST Young Investigator), University of Hawaii at Manoa, USA
2006 – 2007	InterRidge Coordinator, Research Associate, WHOI – MA, USA
2005 – 2006	WHOI – USGS Postdoctoral Scholar –MA, USA
2003 – 2004	Guest Investigator, Woods Hole Oceanographic Institution – MA, USA
2000 – 2003	European Union PhD Fellowship – Southampton Oceanography Centre, UK

Other Positions Held

- 2023 Science co-lead, Okeanos Explorer, Seascape Alaska 3 Expedition
- 2021 Science Lead, Okeanos Explorer, Deep Atlantic Stepping Stones Expedition
- 2019 Visiting Researcher, University of Gothenburg, Sweden
- 2012 2015 Undergraduate Education Coordinator for the Darling Marine Center, ME, USA
- 2011 Adjunct Oceanography Faculty, Sea Education Association, Woods Hole, MA, USA
- August December 2010 Adjunct Research Professor, University of Maine, USA
- February 2010 Visiting researcher, Paleo-DNA Laboratory, Lakehead University, Canada
- September 2009 Visiting Researcher, Paleo-DNA Laboratory, Lakehead University, Canada
- October 2007 Visiting Researcher, Paleo-DNA Laboratory, Lakehead University, Canada
- April 2006 Visiting Researcher, Paleo-DNA Laboratory, Lakehead University, Canada
- Visiting Researcher, Faleo DIVA Edoratory, Edicined Oniversity, ed
- July 2004 Collaborating Researcher, Dunstaffnage Marine Laboratory, UK
- **June September 2002**, Woods Hole Oceanographic Institution Exchange Program (funded by Southampton Oceanography Centre), USA.

Publications

*Graduate student author ** Undergraduate student author

H-Index (Google Scholar) = 16; i10 Index (Google Scholar) = 23; All citations 891

- **44.** Beaumont, J.C., Moss, G., Tracey, D., **Waller, R.G.,** Cummings, V.J., Marriott, P., Clark, M.R. (2024) Opportunistic observations of reproductive mode, larval settlement and development of a New Zealand deep-sea stony coral, *Goniocorella dumosa*. Marine Biology, 171, 4
- **43. Waller, R.G.,** Goode, S., Tracey, D., Johnstone, J., Mercier, A., (2023) A review of current knowledge on reproductive and larval processes of deep-sea corals. Marine Biology, 170, 58

- **42.** Heran, T., Laudien, J., **Waller, R. G.,** Häussermann, V., Försterra, G., González, H. E., & Richter, C. (2023). Life cycle of the cold-water coral *Caryophyllia huinayensis*. *Scientific Reports*, *13*(1), 2593.
- **41.** *Johnstone J, Lunden J, **Waller RG,** Poulton N, Togami H (2022) Antarctic deep-sea coral larvae may be resistant to end-century ocean warming, *Coral Reefs*, 41, 1495-1510, https://doi.org/10.1007/s00338-022-02297-w
- **40.** * Farfan, G. A., Apprill, A., Cohen, A., DeCarlo, T. M., Post, J. E., **Waller, R. G.**, & Hansel, C. M. (2022). Crystallographic and chemical signatures in coral skeletal aragonite. *Coral Reefs*, *41*(1), 19-34.https://doi.org/10.1007/s00338-021-02198-4
- **39.** *Johnstone, J.W., **Waller, R.G.** & Stone, R.P. (2021) Shallow-emerged coral may warn of deep-sea coral response to thermal stress. *Sci Rep* 11, 22439, https://doi.org/10.1038/s41598-021-01948-2
- **38.****Pendleton G *Hartill E, **Waller RG** (2021) Notes on reproduction in the deep-sea cup coral *Balanophyllia malouensis* (Squires 1961) from the Southern Ocean, Polar Biology, 44, 977-986, https://doi.org/10.1007/s00300-021-02854-z
- **37.** *Hartill EC, **Waller RG**, Auster PJ (2020) Deep coral habitats of Glacier Bay National Park and Preserve, Alaska. PLoS ONE 15(8): e0236945, https://doi.org/10.1371/journal.pone.0236945
- **36. Waller RG**, Stone RP, **Rice LN, *Johnstone J, *Rossin AM, *Hartill E, *Feehan KA, Morrison CL (2019) Phenotypic plasticity or a reproductive dead end? *Primnoa pacifica* (Cnidaria: Alcyonacea) in the southeastern Alaska region. Frontiers in Marine Science, https://doi.org/10.3389/fmars.2019.00709
- **35.** *Rossin AM, **Waller RG**, Stone RP (2019) The effects of *in-vitro* pH decrease on the gametogenesis of the red tree coral, *Primnoa pacifica*. PLoS ONE 14(4): e0203976. https://doi.org/10.1371/journal.pone.0203976
- **34.** *Fountain CT, **Waller RG**, Auster PJ (2019) Individual and Population Level Variation in the Reproductive Potential of Deep-Sea Corals from Different Regions Within the Gulf of Maine. Frontiers in Marine Science, https://doi.org/10.3389/fmars.2019.00172
- **33.** *Feehan K, **Waller RG**, Haussermann V, Fösterra G (2019) Highly seasonal reproduction in the deepwater emerged coral *Desmophyllum dianthus*. Marine Biology, 166:52
- **32.** *Farfan GA, Cordes E, **Waller RG**, DeCarlo TM, Post J, Hansel CM (2018) Mineralogy of deep-sea coral aragonites as a function of aragonite saturation states. Frontiers in Marine Science, 5, 473, DOI=10.3389/fmars.2018.00473
- **31.** Goldsmith DB, Kellogg CA, Morrison CL, Gray MA, Stone RP, **Waller RG**, Brooke SD, Ross SW (2018) Comparison of microbiomes of cold-water corals *Primnoa pacifica* and *Primnoa resedaeformis*, with evidence connecting microbiome composition to host genotype. Nature Scientific Reports, 8, 12383
- **30.** Rooper C, Stone R, Etnoyer P, Conrath C, Reynolds J, Greene HG, Williams B, Salgado E, Morrison C, Waller RG, Demopoulos A (2017) Deep-sea coral research and technology program: Alaska deep-sea coral and sponge initiative final report. NOAA Technical Memorandum, NMFS-OHC-2,
- **29.** *Auscavitch SR & **Waller RG** (2017) Biogeographical patterns among deep sea megabenthic communities across the Drake Passage. Antarctic Science, 29(6) 531-543
- **28.** **Rossin A, **Waller RG**, Försterra G (2017) Seasonal oocyte maturation in the fjord soft coral *Primnoella chillensi* (Philippi, 1894), Continental Shelf Research, 144, 31-37
- 27. *Feehan, K & Waller, RG (2015) Notes on Reproduction of Eight Species of Eastern Pacific Cold-Water Corals. Journal of the Marine Biological Association, UK, 95(4) 691-696
- **26.** **Margolin AR; Robinson LF; Burke A; **Waller, RG**; Scanlon KM; Roberts ML; Auro ME; van de Flierdt T (2014) Temporal and spatial distributions of cold-water corals in the Drake Passage: Insights from the last 35,000 years. Deep Sea Research Part II: Topical Studies in Oceanography, 99, 237-248
- **25. Waller, RG**; Stone RP; **Johnstone J; Mondragon J (2014) Sexual Reproduction and Seasonality of the Alaskan Red Tree Coral, *Primnoa pacifica*. PLoSONE, https://doi.org/10.1371/journal.pone.0090893
- **24.** *Padilla-Gamino, J; Haedoin L; **Waller, RG**; Smith D; Truong W; Gates RD (2014) Sedimentation and the Reproductive Biology of the Hawaiian Reef-Building Coral *Montipora capitata*. Biological Bulletin, 226(1), 8-18

- **23.** Auster, PJ; Kilgour M; Packer D; **Waller, RG**; *Auscavitch S; Watling, L (2013) Octocoral gardens in the Gulf of Maine. Biodiversity, 14(4) 193-194
- **22. Waller, RG** & **Feehan K (2013) Reproductive Ecology of a Polar Deep-Sea Scleractinian *Fungiacyathus marenzelleri* (Vaughan, 1906). Deep Sea Research II, 92, 201-206
- **21.** *Wagner, D; **Waller, RG**; Montgomery, AD; Kelley, CD; Toonen, RJ (2012) Sexual reproduction of the Hawaiian black coral *Antipathes griggi* (Cnidaria: Antipatharia). *Coral Reefs.* 31, 795-806 DOI: 10.1007/s00338-012-0882-3
- **20.** Waller, RG; Stone, RP; Mondragon, J & **Clark, CE (2011) Reproduction of Red Tree Corals in the Southeastern Alaskan Fjords: Implications for Conservation and Population Turnover. Proceedings of the American Academy of Underwater Sciences 30th Symposium, 29-32
- **19. Waller, RG** & Robinson, LF (2011) Southern Ocean Corals: Cabo de Hornos, Coral Reefs, OI: 10.1007/s00338-011-0852-1
- **18.** *Wagner, D; **Waller RG** & Toonen, R (2011) Sexual reproduction of Hawaiian black corals, with a review of reproductive processes within the order Antipatharia (Cnidaria: Anthozoa: Hexacorallia). *Invertebrate Biology*, 130(3): 211-225
- **17. Waller, RG**; Scanlon, K & Robinson, L (2011) Cold-water coral distributions in the Drake Passage from towed camera observations. *PLoS ONE*, 6(1) e16153. doi:10.1371/journal.pone.0016153
- **16.** **Bayer, SM; Mullineaux, LS; **Waller, RG** & Solow, AR (2011) Reproductive traits of pioneer gastropod species colonizing a deep-sea hydrothermal vent after an eruption. *Marine Biology,* 158, 181-192 *DOI:* 10.1007/s00227-010-1550-1
- **15.** Morrison, CL; Ross, SW; Nizinski, MS; Brooke, S; Jarnegren, J; **Waller, RG**; Johnson, RL & King, TL (2011) Genetic discontinuity among regional populations of *Lophelia pertusa* in the North Atlantic Ocean. *Conservation Genetics*, 12:713-729
- **14.** *Padilla-Gamino, JL; Weatherby, TM; **Waller, RG** & Gates, RD (2011) Formation and structural organization of the egg-sperm bundle of the scleractinian coral *Montipora capitata*. *Coral Reefs*, 30:371-380
- **13. Waller, RG** & Tyler, PA (2011) Reproductive patterns in two deep-water solitary corals from the Northeast Atlantic *Flabellum. alabastrum* and *F. angulare* (Cnidaria: Anthozoa: Scleractinia). *Journal of the Marine Biological Association, UK,* 91(3): 669-675
- **12.** Scanlon, KM; **Waller**, **RG**; Sirotek, A; Knisel, JM & Alesandrini, SM (2010) USGS Cold-Water Coral Geographic Database Gulf of Mexico and Western North Atlantic, Version 1.0. *USGS Open File Report*
- **11. Waller, RG**; Tyler, PA & Smith, C (2008) Fecundity and embryo development of three Antarctic deepwater scleractinians: *Flabellum thouarsii, F. curvatum* and *F. impensum. Deep-Sea Research II,* 55: 2527-2534
- **10. Waller, RG**; Watling, L; Auster, P & Shank, TM (2007) Fishing Impacts on the Corner Rise Seamounts. *Journal of the Marine Biological Association, UK*, 87: 1075-1076
- **9. Waller, RG** & Baco-Taylor, A (2007) Reproductive morphology of three Hawaiian deep-water precious corals. *Bulletin of Marine Science*, 81(3): 533-542
- **8.** Robinson, LF; Adkins, JF; Scheirer; DS, Fernandez, DF; *Gagnon, A & **Waller RG** (2007) Deep-sea scleractinian coral age and depth distributions in the NW Atlantic for the last 225 thousand years. *Bulletin of Marine Science*, 81(3): 371-391
- **7. Waller, RG**; Adkins, J; Robinson, L & Shank, TM (2007) Ancient DNA techniques and their utility in deepwater coral research. *Bulletin of Marine Science*, 81(3): 351-359
- **6.** *Flint, H; **Waller, RG** & Tyler, PA (2007) Reproduction in *Fungiacyathus marenzelleri* from the northeast Pacific Ocean. *Marine Biology*, 151(3): 843-849
- **5. Waller, RG**; Tyler, PA & Gage, JD (2005) Sexual reproduction of three deep water *Caryophyllia* (Anthozoa: Scleractinia) species from the NE Atlantic Ocean. *Coral Reefs*, 24(4): 594-602
- **4. Waller, RG** & Tyler PA (2005) The reproductive biology of two deep-sea, reef-building scleractinians from the NE Atlantic Ocean. *Coral Reefs*, 24(3): 514-522

- **3.** Waller, RG (2005) Deep Water Scleractinians: Current knowledge of reproductive processes. *In:* Freiwald A & Roberts JM (eds) Cold-water Corals and Ecosystems. Springer, Heidelberg, 691-700
- 2. Fornari D; Billings, A; Catanach, R; Liberatore, S; Swartz, M; Hammar, T; Meirer, G; Gould, M; Fucile, P; Doherty, K; Duester, A; Bradley, A; Waller, RG; Buckman, K; Ferreira M (2003) A new deep-sea towed digital camera and multi-rock coring system. EOS Transactions of the American Geophysical Union, 84(8): 69-76
- **1. Waller, RG**; Tyler, PA & Gage JD (2002) The reproductive ecology of the deep-sea solitary coral *Fungiacyathus marenzelleri* (Scleractinia) in the NE Atlantic Ocean. *Coral Reefs*, 21(4): 325-331

Publications in revision, submitted, and close to submission

Ramirez-Lodra E. et al. (submitted to Elementia: Science of the Anthropocene) The emerging picture of a diverse deep Arctic Ocean seafloor: from habitats to ecosystems

*Klásen M, Häussermann V, **Waller R.G.** (in final preparation for Continental Shelf Research) Sexual reproduction and seasonal gametogenesis in a corallimorpharian from the Patagonian fjords, *Corynactis chilensis* (Carlgren 1941)

*Heran T., **Waller R.G.**, Richter C., Häussermann V., Laudien J (in final preparation) Simultaneous hermaphroditism in the brooding cold-water coral *Caryophyllia huinayensis* from an acidified fjord

*Campoy AN, *Acevedo-Romo I, Häussermann V, Försterra G, **Waller RG** (prepared for Coral Reefs) Early life stages of the cold-water gorgonian coral *Primnoella chilensis*.

Non-Peer Reviewed Publications

- 2022 Waller RG; Cantwell, K; Lirette, C; Murillo, FJ; Kenchington, E (2022) Summary of the Vulnerable Marine Ecosystem Indicators Observed in the NAFO Closed Areas on the *Okeanos Explorer* Expedition "2021 North Atlantic Stepping Stones: New England and Corner Rise Seamounts". NAFO SCR Doc. 21/48, Serial No. N7248, Scientific Council Meeting, November 2021
- 2021 Cantwell, K; Galvez, K; Hoy, S; Waller, RG (2021). Video data collected during the EX2104: 2021 North Atlantic Stepping Stones: New England and Corner Rise Seamounts (ROV and Mapping) expedition on NOAA Ship OKEANOS EXPLORER in the North Atlantic Ocean from 2021-06-30 to 2021-07-29 (NCEI Accession 0240591). NOAA National Centers for Environmental Information. Dataset. https://doi.org/10.25921/pbs1-ad27.
- 2021 Cantwell, K; Galvez, K; Hoy, S; Waller, RG (2021). Oceanographic data collected during the EX2104: 2021 North Atlantic Stepping Stones: New England and Corner Rise Seamounts (ROV and Mapping) expedition on NOAA Ship OKEANOS EXPLORER in the North Atlantic Ocean from 2021-06-30 to 2021-07-29 (NCEI Accession 0240591). NOAA National Centers for Environmental Information. Dataset. https://doi.org/10.25921/pbs1-ad27.
- **2021** Tracey, D.M., Goode, S., Marriott, P., **Waller, R**. Protected coral reproduction. Report prepared for Department of Conservation. NIWA Client Report WN2012-083: 30 p.
- 2020 Alaska Coral and Sponge Initiative Workshop Report.
- 2017 Morrison CL, Coykendall DK, Springmann MJ, Shroades KM, Sanders LR, Waller RG, Ross SW, Brooke SB. 2017. Chapter 14: Scleractinian coral biodiversity and patterns of inter-canyon connectivity among four coral species. In: CSA Ocean Sciences, Inc. Ross S, Brooke S, Baird E, Coykendall DK, Davies A, Demopoulos A, France S, Kellogg C, Mather R, Mienis F, Morrison C, Prouty N, Roark B, Robertson C. 2017. Exploration and Research of Mid-Atlantic Deepwater Hard

- Bottom Habitats and Shipwrecks with Emphasis on Canyons and Coral Communities: Atlantic Deepwater Canyons Study. Draft Report. Sterling (VA): U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region. OCS Study BOEM 2017-060. 1,000 p.
- **2015** Introduction for Drake Passage multibeam data release via PANGEA. Hoy SK, Robinson LF, Scanlon KM, **Waller RG**. PANGEA
- **2015** *Opportunistic Multibeam Surveying* Hydro International (October 2015) Hoy, S; Robinson LF; Huvenne VAI; Contributing Authors, Scanlon K & **Waller RG**.
- 2014 Imaging Surveys of Select Areas in the Northern Gulf of Maine for Deep-sea Corals and Sponges during 2013-2014. Report to the New England Fishery Management Council 30 October 2014. Peter J. Auster, David Packer, Rhian Waller, Steven Auscavitch, Les Watling, Martha S. Nizinski, Ivar Babb, Donna Johnson, Jeffrey Pessutti, Amy Drohan, Brian Kinlan. Available at ResearchGate DOI: 10.13140/RG.2.1.4760.0163.
- **2013** INDEEP (2) *Investigating Offshore New England Waters for Deep-Sea Coral Presence*. Kilgour, M., Auster, P., Packer, D., **Waller, R**., Auscavitch, S.
- **2012 Present** National Geographic Explorers Journal 2012 Current http://newswatch.nationalgeographic.com/author/rwaller/
- **2007** Corner Rise Seamounts: The Impact of Deep-sea Fisheries. Watling, L., R. Waller, & P.J. Auster, ICES Insight No. 44: 10-14, 2007

Selected Recent Abstracts

- Morrison CL, Everett MV, Waller RG, Stone RP (2023) Estimates of genomic connectivity in a keystone spp, the red tree coral (*Primnoa pacifica*) in SE Alaska, confirm remarkable phenotypic plasticity in reproductive traits. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Häussermann V, Laudien J, Acevedo-Romo I, Campoy AN, Heran T, Waller RG, Sellanes J, Försterra G (2023) Cold-water coral forests (Cnidaria, Anthozoa and Hydrozoa) of Chilean Patagonia: unique deep-water emergent benthic communities threatened by aquaculture and climate change. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Moran DM, Beckmann LM, Acevedo-Romo I, Havenhand J, Larsson A, Waller RG (2923)
 Fertilization experiments on the widespread cold-water coral Lophelia pertusa. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Campoy AN, Acevedo-Romo I, Häussermann V, Försterra G, Waller RG (2023) Early-life stages of the cold-water gorgonian coral *Primnoella chilensis*. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Johnstone J, Goode S, Waller RG, Tracey D, Mercier A (2023) A review of current knowledge and larval processes of deep-sea corals. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Fountain CT, Rice LN, Waller RG, Simpson A, Young CM (2023) Methods for estimating the reproductive capacity of morphologically complex cold-water corals. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Sire de Vilar A, Carreiro-Silva M, Rakka M, Strömberg S, Pham C, Pereira JM, Waller RG, Beckmann LM, Larsson A (2023) Effects of barious abiotic stressors on the early life stages of the cold-water coral *Lophelia pertusa*. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Beckmann L, Hoff G, Waller RG (2023) Deepwater coral and sponge gardens in Alaska: Reproduction and recruitment of keystone species. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023

- Beaumont J, Moss G, Tracy D, Cummings V, Waller RG, Marriott P, Clark M (2023) Reproductive mode, larval settlement and development of a New Zealand deep-sea stony coral, *Goniocorella dumosa*. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Acevedo-Romo I, Waller RG, Campoy AN, Försterra G, Häussermann V (2023) Larval ecology of *Desmophyllum dianthus* from the Chilean fjords. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Johnstone J, Lunden J, Waller RG, Poulton N, Togami H (2023) Antarctic deep-sea coral larvae may be resistant to end-century warming. 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- Galvez KC, Cantwell K, Hoy S, Waller RG, Chaytor J, Mizell K (2022) 2021 North Atlantic Stepping Stones: New Discoveries of the New England and Corner Rise Seamounts Region. Ocean Sciences, Honolulu, HI, USA, January 2022
- Carson H, **Waller RG**, EX2104 Participants (2021) Coral communities on the New England and Corner Rise Seamounts. Deep Sea Biology Symposium, Brest, France, Sept 2021
- Morrison CL, Everett MV, Waller RG, Stone RP (2018) Population genomics reveals complex connectivity patterns among southeast Alaskan populations red tree coral (*Primnoa pacifica*).
 Deep Sea Biology Symposium, Monterey CA, USA, Sept 2018
- Fountain, CT, **Waller, RG**, Auster PJ (2018) From Polyp to Population: A Tale of Two Corals. Deep Sea Biology Symposium, Monterey CA, USA, Sept 2018
- Waller, RG and the Science Party (2016) Cold Water Coral Ecosystems in Glacier Bay National Park, 6th International Symposium on Deep Sea Corals, Boston, Sept 2016
- Feehan, K; **Waller, RG** (2016) Reproduction in *Desmophyllum dianthus* from the Chilean Fjords. 6th International Symposium on Deep Sea Corals, Boston, Sept 2016
- Auster, PA; Packer D; **Waller RG**; Pessutti J (2016) Identifying Spatially rare deep-sea coral communities in the Gulf of Maine. 6th International Symposium on Deep Sea Corals, Boston, Sept 2016
- Hoy, SK; Robinson, LF; Huvenne VAI; Scanlon KS; Waller, RG (2014) Opportunistic multibeam surveying: a case study expanding bathymetric coverage in remote waters during research expeditions. US HYDRO
- Waller, RG; Stone, R; Mondragon, J (2012) Reproduction of a Deepwater Emerged Octocoral in the Southeastern Alaskan Fjords. 5th International Deep-Sea Coral Symposium, Amsterdam, April 2012
- Waller, RG; Robinson, LF; Scanlon KM; NBP11-03 Science Party (2012) Southern Ocean Corals: Surprising Diversity and Abundance. 5th International Deep-Sea Coral Symposium, Amsterdam
- Waller, RG; Stone, R; Mondragon, J & Clark, CE (2011) Reproduction of Red Tree Corals in the Southeastern Alaskan Fjords: Implications for conservation and population turnover. AAUS, Portland ME.
- Waller, RG; Robinson, L; Scanlon, KM; Blackwood, D & NBP08-05 Science Party (2010) Cold-water coral distributions in the Drake Passage from towed camera observations — the NBP08-05 Expedition. Deep Sea Biology Symposium, Reykjavik, Iceland
- Waller, RG; Matheson, C; Taviani, M; Shank, T; Adkins, J & Robinson, L (2010) Methodological advances in ancient DNA techniques for cold-water corals: Utility for phylogenetic studies. Deep Sea Biology Symposium, Reykjavik, Iceland
- Waller, RG; Robinson, LF; Scanlon, K, Blackwood, D (2008) Corals in the Antarctic, the NBP0805 Expedition. 4th International Deep Sea Coral Symposium, Wellington, New Zealand

Invited Talks

- **2023 Dive into the Deep Sea.** Forskfredag (Science Friday) Nösnäsgymnasiet (Nönäs High School), October 2023
- **2020 Cool Corals Live Down Deep.** Oregon Institute of Marine Biology Summer Seminar Series (virtual due to covid19).
- **2019 Climate Change Effects on Cold Water Coral Reproduction.** The Lovén Centre Tjärnö, University of Gothenburg, January 2019
- 2018 Cool Corals. Skidompha Library, Chats with Champions, Damariscotta, ME,
- 2017 Hiding in the Depths; Cool Corals in the Gulf of Maine. Ocean Engineering/CCOM seminar series, UNH
- 2016 Cold Water Corals. Society for Women in Marine Science, WHOI, USA, September 2016
- 2016 Reproductive Seasonality of the Deepwater Emerged Coral, *Primnoa pacifica*, in the Alaskan Fjords. Tjarno Marine Laboratory, University of Gothenburg, Sweden, April 2016
- **2016 Introducing Reproduction in Cold Water Corals.** Tjarno Marine Laboratory, University of Gothenburg, Sweden, April 2016
- 2015 Coral Ecosystems of the Gulf of Maine. Belfast Free Library, ME, November 2015
- 2015 Cool Corals in Hot Water. Palmer Station Science Night, Antarctica, October 2015
- 2015 Coral Ecosystems of the Gulf of Maine. Jesup Memorial Library, ME, January, 2015
- **2014 Coral Ecosystems of the Gulf of Maine.** Merryspring Nature Center, Camden, ME, April 2014
- **2014 Peering into the Darkness: Corals in the Strangest Places.** Skidompha Library Chats with Champions, Damariscotta, ME, April 2014
- 2014 Cold Water Corals. Shanghai Ocean University, China, March 2014
- 2014 Cold Water Corals. Xiamen University, China, March 2014
- **2013 Into the Deep Unknown**. University of Maine Mid Coast Alumni Association. After dinner speaker, April 2013
- 2013 From the Poles to the Deep Ocean: Corals living and thriving in cold waters. Smith College Life Sciences Colloquia Series, Massachusetts, February 2013
- **2012 Patagonian Fjords Expedition.** Closer Look Seminar Series. National Geographic Headquarters, Washington DC, September 2012
- 2012 <u>Keynote</u> Reproduction of a Deepwater Emerged Octocoral in the Southeastern Alaskan Fjords. 5th International Deep-Sea Coral Symposium, Amsterdam, April 2012
- 2010 Cold Water Corals: The implications of climate change on polar deep-water species. University of Maine, May 2010
- **2010 Corals in Cold Water, from the Poles to the Deep Ocean**. Lakehead University, Canada, February 2010
- **2009 Corals in Cold Water**. Institute of Marine Sciences. University of Alaska, Fairbanks, USA, January 2009
- **2008** <u>Keynote</u> <u>Reproduction of Antarctic Cold-Water Corals</u>. 4th International Deep-Sea Coral Symposium, Wellington, New Zealand, December 2008
- **2007 Deep Water Corals; Past, Present and Future.** Hawaii Institute of Marine Biology, University of Hawaii, February 2007
- **2007 Deep Water Corals; Past, Present and Future.** School of Ocean and Earth Sciences, University of Hawaii, February 2007
- **2006 Ancient DNA Techniques in Deep-Water Corals**. Ocean Climate Change Institute, Woods Hole, MA, October 2006
- 2005 Cold-Water Scleractinians: Reproductive Processes at Depth. Darling Marine Center, Maine, November 2005

• 2003 – <u>Keynote</u> - The Reproductive Ecology of Two Deep-Sea Reef Building Corals from the NE Atlantic Ocean. 2nd International Deep-Sea Coral Symposium, Erlangen Germany, September 2003

Research Funding, Year Received, (*Active Grants)

- *2022 Waller RG & Hoff G Reproduction of Alaskan Corals, \$309,721, North Pacific Research Board
- **2021 Waller RG** & Etnoyer P Recruitment, Reproduction and Larval Supply in Alaskan Deep-Water Corals and Sponges, \$187,556, NOAA/NMFS/AFSC, Deep Sea Coral Initiative
- **2017 Waller RG** & Larsson A 1,291,373 SEK (\$144,683) Cold water coral larval survivorship under environmental stressors: assessing anthropogenic impacts on vulnerable ecosystem engineers. Marie Curie, MoRE2020 Vastra Gotaland
- **2015** Stone R & **Waller, RG** \$73,640 *Ocean Acidification Experimentation on Primnoa pacifica* NOAA/NMFS
- 2014 Waller, RG \$875,000 Exploration of Underwater habitats in Glacier Bay National Park NOAA Ocean Exploration
- **2014 Waller, RG** & Auster PJ \$352,318– *Corals in the Gulf of Maine* NOAA Deep Sea Coral Research and Technology Program
- **2013 Waller, RG** & Stone R \$49,800 *Reproductive comparisons of deep Primnoa pacifica in the Gulf of Alaska* NOAA/NMFS
- 2013 Waller, RG \$381,384 Cold Corals in Hot Water Investigating the Physiological Responses of Antarctic Coral Larvae to Climate change Stress — National Science Foundation: Polar Programs
- **2012 Waller, RG** & Stone R \$48,816 Reproductive ultrastructure of red tree corals from Tracy Arm Fjord, southeastern Alaska: delving deeper into recovery dynamics NOAA/NMFS
- 2012 Waller, RG 22,546 Euros Natural Laboratories in the Chilean Fjords: Studying Reproduction and Development in Emergent Deep-Sea Corals — National Geographic Society, Global Exploration Fund
- **2012 Waller, RG** \$78,457 *RAPID: Natural Laboratories in the Chilean Fjords: Studying Reproduction and Development in Emergent Deep-Sea Corals* National Science Foundation: Biological Oceanography
- **2012 Waller, RG** \$87,082 *Life history characteristics of West Coast deep-sea coral species* NOAA West Coast and Polar Regions/ Deep Sea Coral Research and Technology Program.
- 2012 Waller, RG \$2000 Deep technical dive training Women Divers Hall of Fame
- 2011 Waller, RG & Robinson, LF \$484,774 Collaborative Research: Historic perspectives on climate and biogeography from deep-sea corals in the Drake Passage — National Science Foundation: Polar Programs
- **2011 Waller, RG** \$20,000 Exploring the Gulf of Maine using deep technical SCUBA UMaine Faculty Research Awards.
- **2011 Waller, RG** \$20,000 Biogeography of Marine Habitats USGS
- **2010 Waller, RG** \$13,000 *Reproduction in Red Tree Coral -* National Geographic/Waitt Foundation
- **2010** Stone, R & **Waller, RG** \$24,804 *Reproductive ecology of the red tree coral (Primnoa pacifica)* NOAA/NMFS
- **2008 Waller, RG** \$10,000 *Biogeography of Deep-Sea Corals from Drake Passage seamounts* Census of Marine Life for Seamounts
- **2007** Robinson, LF & **Waller, RG** \$441,543 *Glacial Radiocarbon Constraints from Drake Passage Deep-Sea Corals* National Science Foundation: Polar Programs

- **2007 Waller, RG** & Shank, T \$207,221 Paleogenetics of Pleistocene Deep-Water Corals from the Mediterranean Sea: The Rise and Fall of Coral Populations within the Basin National Science Foundation: Biological Oceanography
- **2007 Waller, RG** & Robinson, LF \$5,000 *Establishing Collaborations with La Fundación Huinay, Chile* WHOI Mary Sears
- **2007** France, S; Shank, T; **Waller, RG** \$216,625 *Collaborative Research: Stepping Stones Across the Atlantic: Co-evolution and Dispersal of Deep-Water Corals and Their Associates on NW Atlantic Seamounts* National Science Foundation: Biological Oceanography
- **2007 Waller, RG** \$100,000 Biogeography of marine habitats USGS
- **2005 Waller, RG** \$50,000 *Marine Habitat Studies* United States Geological Survey
- **2005 Waller, RG** & Shank, T \$97,779 New Molecular Tools to examine Paleophylogeographic Responses to Climate Change: Ancient Coral Migrations in the North Atlantic -WHOI Ocean Life and Ocean Climate Change Institutes
- 2005 Shank, T; Waller, RG; Adkins, J \$124,659 Stepping Stones Across the Atlantic: Exploring Pathways and Barriers to the Dispersal and Evolution of Deep-Sea Corals and Associated Fauna NOAA Ocean Exploration

Teaching Experience

Gothenburg University

- 2022 Present (Spring) MAV112 Worlds Oceans and Deep Sediments 1 week module on Plankton and 1 week module on the Deep Sea
- 2022 Present (Spring and Fall) BIO267 Marine Biodiversity 5 week module on Invertebrates

Gothenburg University – Bachelors Thesis Supervision

• 2023 - 2024 - Emelia Börjesson - Reproduction in *Polymastia* sp. Sponge.

University of Maine

- 2017 2021 (Spring & Summer) SMS374 Deep Sea Biology (3 credits, online course)
- 2015 2021 (Fall) SMS480/INT510 Invertebrates of the Maine Coast (4 credits)
- 2014 2017 (Fall) SMS350 Semester by the Sea Seminar (1 credit)
- 2014 (Summer) SMS491 Larval Ecology (3 credits)
- **2013 (Summer)** SMS491 Functional Morphology and Histology of Marine Invertebrates (3 credits) co-teach ½ course
- **2012** SEA Semester Oceanography (3 credits) Adjunct lecturer for SEA Semester in Woods Hole (MA), six weeks intensive teaching for 15 students

University of Maine – Undergraduate Thesis Supervision (3 credits) Capstone (final year) and Honors -

- **2020 2021 –** Capstone Thesis Advised (4) Ashley Wackerman, Evan Dunn, Megan Dunnock, Jocelyn Cooper
- 2020 2021 Honors Thesis Advised (2) Ciara Lawrence, Josh Lynn
- 2018 2019 Capstone Thesis Advised (2) Genny Wilson, Hannah Kerigan
- **2017 2018 –** Honors Thesis Committee (1) Molly Westbrook
- **2017 2018 –** Capstone Thesis Advised (4) Katherine Lasdin, Jennifer Fields (CUGR Funding), Charles Clark, Joshua Cook
- 2016 2017 Capstone Theses Advised (2) Taja Harper, Aaron Burdeau
- 2016 2017 Honors Theses Committee (2) McKenzie Thompson, Kelsey Moon
- **2015 2016** Honors Thesis Advised (1) Audrey Dean

- 2015 2016 Capstone Theses Advised (2) Ashley Rossin, Elise Hartill
- **2014 2015 –** Capstone Theses Advised (5) Melissa Hoffman, Madison Leary, Darron Kriegel, Sabrina Pearson, Caroline Lawrence
- 2013 2014 Capstone Theses Advised (3) Amy Wyman, Sam Roush, Colleen Anderson
- 2012–2013 Capstone Theses Advised (3) Keri Feehan, Zachary Carbee, Christina Genz
- 2011-2012 Capstone Theses Advised (2) Robert Cefola, Iain Philbrook

University of Hawaii at Manoa

- 2010 OCN621 Biological Oceanography (3 credits) Co-teach 1/3 course
- 2009 2010 OCN201 Science of the Sea (3 credits) Co-taught 1/3 course for 2 years.
- 2009 OCN621 Biological Oceanography (3 credits) Corals and Coral Reef Biology 4 lectures
- 2008 OCN628 Benthic Biology (3 credits) Reproduction and Recruitment 1 lecture
- 2008 OCN628 Benthic Biology (3 credits) Recruitment and Adult-Larvae Interactions 2 lectures
- **2008** OCN628 Benthic Biology (3 credits) Corals 6 lectures, 2 labs "Corals, the Basics", "Anthropogenic Impacts", "Coral Reefs" and "Deep-Water Corals"

Postdoctoral Fellows Advised

• **Jay Lunden** (2015 – 2016) – Climate change effects on Antarctic coral larvae – now faculty at Haverford University

Graduate Advising, Committees & Defenses (* in progress)

- *Yasmine Ahlman, M.Sc. Göteborg Universitet (Sweden) "Interannual changes in *Lophelia pertusa* reproduction at Tisler Reef" Advisor
- *Lara Beckmann, PhD Göteborg Universitet (Sweden) "Reproduction and Recruitment of Deep Sea Sponges and Corals in Alaska" Advisor
- *Diego Moreno Morán, PhD Göteborg Universitet (Sweden) "Fertilization processes in deep sea scleractian corals" Advisor
- 2023 Lova Eveborn, M.Sc. Göteborg Universitet (Sweden) "Reproduction of Bubblegum Corals"
 Advisor
- **2023 Jonas Rasim, M.Sc. -** Göteborg Universitet (Sweden) "Spawning behavior of *Lophelia pertusa* in aquaria" Advisor
- **2022 Maja Klasén, M.Sc.** Göteborg Universitet (Sweden) "Reproduction of the Chilean Coralymopharia *Corynactis spp.*" Advisor
- *Emily Pierce, Ph.D. University of Maine/ University of New England "eDNA in Invasive Invertebrates" Committee
- *Thomas Heran, Ph.D. Alfred Wagener Institute for Polar and Marine Research "Reproductive Ecology of Corals from the Huinay Fjord, Patagonian Chile Committee
- **2021 Julia Johnstone, Ph.D.** University of Maine "Environmental Impacts on the Reproduction of Three Cold Water Corals, with Implications for their Vulnerability to Ocean Warming and Climate Change." Advisor
- **2019 Elise Hartill, M.Sc.** University of Maine "Biogeography across a gradient of glacial retreat in Glacier Bay National Park and Preserve" Advisor
- 2018 C. Tyler Fountain, M.Sc. University of Maine "Cold Corals in the Gulf of Maine" Advisor
- **2018 Ashley Rossin**, **M.Sc.** University of Maine "Ocean Acidification Effects on Reproduction of *Primnoa pacifica*" Advisor
- **2016 Suzanne Stromberg, Ph.D.** University of Gothenburg "Embryogenesis and Larval Ecology of the Deep-Water Coral *Lophelia pertusa*" Ph.D. Opponent

- **2016 Keri Feehan, M.Sc.** University of Maine "Seasonal Reproduction in a Chilean Fjord Coral, *Desmophyllum dianthus*" Advisor
- **2014 Steve Auscavitch M.Sc.** University of Maine "Biogeographic Patterns Among Deep-Sea Benthic Megafaunal Communities Across the Drake Passage (Southern Ocean)" Advisor
- **2011 Daniel Wagner Ph.D.** University of Hawaii at Manoa Reproduction in Hawaiian Black Corals Committee Member
- **2011 Jackie Padilla-Gamino Ph.D.** University of Hawaii at Manoa Ecology of *Montipora capitata* Committee Member
- **2010 Anela Choy Ph.D.** University of Hawaii at Manoa Food Web Linkages in the Central North Pacific PQE Exam Committee
- 2003 Hannah Flint, M.Sc. Southampton Oceanography Centre (UK) "Reproductive ecology of the deep sea scleractinian Fungiacyathus marenzelleri from the Pacific Ocean" – Co-Advised under Prof. Tyler
- **2003 Kathryn Johnson, M.Sc.** Southampton Oceanography Centre (UK) "Reproduction of deep-sea Antarctic Actinarians" Co-Advised under Prof. Tyler

Professional Affiliations & Committees

- 2023 Present Editorial Board, Invertebrate Reproduction and Development
- 2023 Present Department of Marine Sciences (Göteborg Universitet) Marine Colloquium Series Co-Organizer
- 2021 School of Marine Sciences (University of Maine) Peer Committee
- **2021- Present –** Associate Editor, Frontiers in Marine Science Deep-Sea Environments and Ecology
- **2021 Present** Deep Ocean Stewardship Initiative: Challenger 150 Decade Working Group on the Arctic
- 2021 University of Maine College of Natural Sciences, Forestry and Agriculture Research Awards Committee
- 2020 2021 School of Marine Sciences (University of Maine) Retreat organization committee
- 2019 Present Science Council, Horizon 2020 EU Project iAtlantic
- **2015 2021** UNOLS Council (2 terms)
- 2015 School of Marine Sciences (University of Maine) Hiring Committee, Marine Physiologist
- **2015 2021** School of Marine Sciences (University of Maine) Undergraduate Curriculum Committee
- 2014 2017 School of Marine Sciences (University of Maine) Peer Committee
- 2013 2021 University of Maine Dive Control Board
- 2013 Fellow National of the Explorers Club (voted membership)
- 2013 Women Divers Hall of Fame Associate Member
- 2013 University of Maine School of Marine Sciences Field Experiences for Undergraduates Committee
- 2011 2012 Organizing Committee: 5th International Deep-Sea Coral Symposium, Amsterdam
- 2005 2006 Postdoctoral Committee Woods Hole Oceanographic Institution

Awards

- 2015 Voted into the Explorers Club
- **2012** National Geographic Explorer http://www.nationalgeographic.com/explorers/bios/rhian-waller/
- 2011 Antarctic Service Medal of the United States of America
- 2002 Outstanding Student Paper Award AGU Fall Meeting, San Francisco

- **2002** Woods Hole Oceanographic Institution Southampton Oceanography Centre, Exchange Program
- Daily Telegraph Young Science Writer Award, 2000 (Merit), 2001 (Runner Up), 2002 (Runner Up), 2003 (Finalist)

Community Service

Proposal Panel Member -

- 2018 National Science Foundation
- 2017 National Science Foundation
- 2011 National Science Foundation EPSCoR Reverse Site Visit

Proposal Reviewer for -

- 2021 National Science Foundation Biological Oceanography, National Science Foundation Polar Programs
- 2020 National Science Foundation Biological Oceanography
- 2019 Geschäftsstelle des Gutachterpanels Forschungsschiffe (German Shiptime Proposal);
 National Science Foundation Biological Oceanography
- 2018 National Science Foundation Polar Programs, National Science Foundation CAREER
- 2017 National Science Foundation Polar Programs, NOAA Ocean Exploration
- 2016 National Science Foundation Polar Programs, CONICYT (Chilean Research)
- **2015** National Science Foundation Polar Programs, National Science Foundation Biological Oceanography
- 2014 National Science Foundation Polar Programs; National Science Foundation CAREER; USGS White Paper Reviews
- 2013 Schmidt Ocean Institute; National Science Foundation: Polar Programs
- 2012 National Science Foundation: Biological Oceanography
- **2011** National Science Foundation: Biological Oceanography; US-Israel Binational Science Foundation.
- **2009** National Science Foundation: Marine Geology and Geophysics; National Science Foundation: Systematic Biology and Biodiversity Inventories; AAUS Student Scholarship Proposals.
- 2008 National Science Foundation: Population and Evolutionary Processes.
- **2007** Interridge Working Group Proposals; National Science Foundation: Biological Oceanography; National Science Foundation: Population and Evolutionary Processes.
- 2005 NOAA Undersea Research Center.

Peer-Reviewer for -

- 2022 Frontiers in Marine Science
- **2021** Frontiers in Marine Science
- 2020 Frontiers in Marine Science, Marine Biology, PLoS ONE
- 2019 Frontiers in Marine Science, Deep Sea Research Part 1
- 2018 Frontiers in Marine Science, Marine Biology Research
- 2017 Marine Biology, Antarctic Science, Frontiers in Marine Science, Marine Biology Research
- 2016 Polar Biology, Proceedings of the Biological Society of Washington
- 2015 PloS ONE, Polar Biology, Coral Reefs
- 2014 Polar Biology; PLoS ONE
- **2013** Deep Sea Research Part 2; PLoS ONE; Marine Ecology Progress Series, Invertebrate Reproduction and Development; Marine Ecology Progress Series

- 2012 Marine Biology; Deep Sea Research Part 2; Invertebrate Reproduction and Development;
 Marine Ecology Progress Series
- **2011** Marine Biology; Deep Sea Research Part 1; Invertebrate Reproduction and Development; Molecular Ecology; Hydrobiologia; Invertebrate Biology.
- **2010** Marine Biology; Marine Ecology Progress Series; Deep Sea Research Part 1; Hydrobiologia; Coral Reefs.
- 2009 Marine Ecology Progress Series; Marine Biology; Biodiversity and Conservation.
- 2008 Marine Biology; Marine Ecology Progress Series.
- 2007 Biological Bulletin, Marine Biology, Coral Reefs.

Workshop and conference organization

- 2023 Session co-chair for 8th International Symposium on Deep Sea Corals, Edinburgh, May 2023
- 2021 Faculty retreat to reconfigure our undergraduate curriculum
- 2016 6th International Symposium on Deep Sea Corals (Boston) Steering Committee
- 2012 5th International Symposium on Deep Sea Corals (Amsterdam) Scientific Committee
- **2007** InterRidge Theoretical Institute Meeting Biogeochemical Interactions at Deep-Sea Vents Working Group Meeting local organizer as InterRidge Coordinator
- **2004** 10th International Coral Reef Symposium (Okinawa) Deep Water Corals session Co-Organized with Amy Baco-Taylor

Outreach Efforts

- **2023** Dive into the Deep Sea. Forskfredag (Science Friday) Nösnäsgymnasiet (Nönäs High School), October 2023
- **2023** NOAA researchers may have discovered two new organisms on the Aleutian seafloor radio interview with KUCB, Your Voice in the Aleutians
- 2022 Diving into the Deep Sea, presentation to Halmstand Högskolan
- **2021** The Maine Question What's so cool about cold water corals? Podcast https://umaine.edu/podcasts/2020/11/05/s3e8-whats-so-cool-about-cold-water-corals/
- 2020 National Geographic Learning: featured in a math textbook Algebra 1, alongside a video interview and webinar. https://www.bigideaslearning.com/programs/high-school/aga-2022/rhian-waller/
- **2019** UMaine Today *In Sweden, Waller shares in-depth knowledge of cold-water corals* Article and Video https://umaine.edu/news/blog/2019/02/15/in-sweden-waller-shares-in-depth-knowledge-of-cold-water-corals/
- **2017** Touch tank at the local YMCA Preschool
- 2016 NSF Science 360 News Research at the Ends of the Earth https://news.science360.gov/obj/video/028ad095-fe1a-41c9-9980-b7c34be3300d/research-ends-earth
- **2016** UMaine Today Undergraduate Research Research at the Ends of the Earth https://umaine.edu/news/blog/2016/07/25/research-ends-earth/
- 2016 National Geographic Kids Diving With Sharks! pp37-67 Rhian Waller: Keeping Your Cool!
- 2015 Semester in Antarctica UMaine News https://umainetoday.umaine.edu/archives/fallwinter-2015/semester-in-antarctica/
- 2014 National Geographic Learning Time Zones English Language Course Student Book 2 story contributor
- 2014 National Geographic Learning & Cengage Learning Environmental Science 15th Edition (Miller GT & Spoolman SE) – story contributor & online bio

- **2014** Rhian Waller to Examine As-of-yet-unexplored Remote Fjords in Glacier Bay National Park and Preserve UMaine News https://umaine.edu/news/blog/2014/10/09/going-deep/
- **2014** Interviewed by NPR for Cold Water Corals in the Gulf of Maine http://news.mpbn.net/post/gulf-maine-coral-formations-dazzle-scientists
- 2013 National Geographic Learning Cambridge English story contributor
- 2013 Researchers Recommend Conservation of Coral Communities. UMaine Today
- **2013** UMaine marine scientist, National Geographic 'risk taker' to study effects of climate change in West Antarctica. Penobscot Bay Pilot
- **2013** National Geographic 125th Anniversary Special, March 2013 featured in the "New Age of Exploration: Risk Takers" http://ngm.nationalgeographic.com/exploration/risk-takers-gallery#/8
- 2013 National Geographic Magazine Lauds UMaine's 'Ice Water Diver'. UMaine Today
- **2012** *Cold Coral*. UMaine Today http://umainetoday.umaine.edu/past-issues/winter-2012/8244-2/
- **2012** *Slideshow Cold Water Corals.* UMaine Today
- 2012 Marine Biologist Gains Funding for Deep Sea Coral Research. UMaine Today
- **2012 2014** National Geographic Explorers Journal http://newswatch.nationalgeographic.com/author/rwaller/
- **2012** Interviewed for video on the 5th International Symposium on Deep Sea Corals http://www.youtube.com/watch?v=edSsnWmlh68
- **2011** COSEE Summer Curriculum Development Workshop Featured Scientist Colby College, July 2011
- 2011 Deep Water Corals in the Drake Passage online expedition creator and writer
- 2010 Interviewed for children's book "Seven Wonders of Exploration Technology", Fred Borth
- 2008 Deep Water Corals in the Drake Passage online expedition creator and writer
- 2007 Coral catastrophe on the Corner Rise Seamounts. Oceanus, Dec 07
- 2006 NSF Science 360 News Picture of the Day: Baby Pictures https://news.science360.gov/obj/pic-day/86c1de6b-eeb3-4ae2-b22c-a3a8fbb4b467/baby-pictures
- 2006 What other tales can coral skeletons tell? Oceanus, Nov 06
- 2006 Creature Feature Deep-Water Corals. CenSeam newsletter No. 5, Nov 2006
- **2006** Lullaby for Larvae: A WHOI biologist becomes midwife for Antarctic Deep-Sea Corals. Oceanus, Aug 2006
- 2006 "Deep-Water Coral" Podcast for the WHOI Ocean Life Institute www.whoi.edu/institutes/podcasts.html
- 2006 Lawrence School (Falmouth) science fair judge
- 2005 Interview and footage of deep-water coral damage for an UNEP documentary
- 2005 NOAA Ocean Explorer North Atlantic Stepping Stones Topic and "Fun Fact" writer
- **2002 2006** Dive and Discover Expeditions 5,6,7 and 9 Mail buoy participant, hot topic writer, photographic contributions

Sea Experience

Over 50 research expeditions on European and American vessels including over a dozen as a Co-PI and three as Chief Scientist. Expeditions took place to the NE, NW and Mid-Atlantic Ocean, Pacific Ocean, Galapagos Islands and the Southern Ocean and involve the use of submersibles, ROV's, AUV's and traditional oceanographic equipment such as OTSB, Agassiz and Blake trawls, dredges, box cores and VanVean Grabs. This does not include numerous undergraduate training cruises onboard small boats and coastal day SCUBA expeditions. Biology lead on two Okeanos Explorer Expeditions (EX2104) to the New England and Corner Rise Seamounts and (EX2304) to the Aleutian Island chain.

SCUBA Experience

- 2012 Decompression Procedures (TDI) 497279 Instructor Sean Harrison (815) Maine, USA
- 2012 Advanced Nitrox (TDI) 497272 Instructor Sean Harrison (815) Maine, USA
- 2012 Divemaster (SDI) 17386 Instructor Christopher Rigaud (16441) Maine, USA
- 2012 Ice Diving (PADI) Instructor David Sinclair (MSDT 41177) Maine, USA
- **2011** Enriched Air Nitrox (PADI) 11080o6633 Instructor Christopher Rigaud (MSDT 95649) Maine, USA
- 2011 Rescue Diver (PADI) 11080r8348 Instructor Christopher Rigaud (MSDT 95649) Maine, USA
- 2010 Advanced Open Water (PADI) 10080i6152 Instructor Kevin Boyce (MSDT 234298) Hawaii, USA
- 2010 Dry Suit (PADI) 10060o7591 Instructor Stephen B. Carey (57815) Massachusetts, USA
- 2009 Open Water (PADI) 09070J1102 Instructor Micheal Angelo (OWSI---233599) Hawaii, USA