

ANN G. DUNLEA

Department of Marine Chemistry and Geochemistry • Woods Hole Oceanographic Institution
266 Woods Hole Road, MS #22, Woods Hole, MA 02543
(508) 289-3423 • adunlea@whoi.edu

EDUCATION

- Ph.D., Earth Sciences**, Boston University Sept. 2016
Dissertation: *Biogeochemistry and geochemical paleoceanography of the South Pacific Gyre*
Adviser: Richard W. Murray
- B.S., Environmental Sciences**, University of Rochester May 2010
Thesis: *Groundwater Age Determination on Nantucket, MA using $^3\text{H}/^3\text{He}$ and ^4He Dating Techniques*
Adviser: Robert J. Poreda

PROFESSIONAL APPOINTMENTS

- Assistant Scientist**, Woods Hole Oceanographic Institution 2019 – Present
- Postdoctoral Research Investigator**, Woods Hole Oceanographic Institution 2018 – 2019
- Postdoctoral Research Scholar**, Woods Hole Oceanographic Institution 2016 – 2018
- Graduate Research Assistant**, Boston University 2010 – 2016
- Undergraduate Research Assistant**, University of Rochester 2009 – 2010

HONORS AND AWARDS

- Ocean and Climate Change Institute Postdoctoral Scholarship, *WHOI* 2016 – 2018
- Director's Award for Outstanding Teaching in the Marine Semester, *Boston University* 2014
- Dean's Fellowship, *Boston University* 2010 - 2011
 - Offered annually to top entering graduate student
- High Distinction and High Honors in Research, *University of Rochester* 2010

PEER-REVIEWED PUBLICATIONS

15. Anderson, C. H., R. W. Murray, **A. G. Dunlea**, L. Giosan, C. W. Kinsley, D. McGee, and R. Tada (2019) Eolian delivery to Ulleung Basin, Korea (Japan Sea) during development of the East Asian Monsoon through the last 12 Ma. *Geological Magazine*, doi: 10.1017/S001675681900013X
14. Giosan, L., W. Orsi, M. Coolen, **A. G. Dunlea**, K. Thirumalai, S. E. Munoz, P. Clift, J. Donnelly, V. Galy, D. Fuller (2018) Neoglacial Climate Anomalies and the Harappan Metamorphosis. *Climate of the Past*, 14, 1669-1686. doi: 10.5194/cp-14-1669-2018
13. **Dunlea, A. G.**, R. P. Scudder, R. W. Murray (2018) Marine Sediment. In White W.M. (eds) Encyclopedia of Geochemistry. Encyclopedia of Earth Sciences Series. Springer, Cham. doi: 10.1007/978-3-319-39312-4_105
12. Anderson, C. H., R. W. Murray, **A. G. Dunlea**, L. Giosan, C. W. Kinsley, D. McGee, and R. Tada (2018) Climatically driven changes in the supply of terrigenous sediment to the East China Sea. *Geochemistry, Geophysics, Geosystems*, 19, 2463-2477. doi: 10.1029/2017GC007339
11. Tada, R., T. Irino, K. Ikehara, A. Karasuda, S. Sugisaki, C. Xuan, T. Sagawa, T. Itaki, Y. Kubota, S. Lu, A. Seki, R. W. Murray, C. A. Alvarez Zarikian; W. T. Anderson, M. Bassetti, B. J. Brace, S.

- C. Clemens, M. H. da Costa Gurgel, G. R. Dickens, **A. G. Dunlea**, S. J. Gallagher, L. Giosan, A. C. G. Henderson, A. E. Holbourn, C. W. Kinsley, G. Soo Lee, K. E. Lee, J. Lofi, C. I.C.D. Lopes, M. Saavedra Pellitero, L. C. Peterson, R. K. Singh, S. Toucanne, S. Wan, H. Zheng, M. Ziegler (2018) High-resolution and -precision correlation of dark and light layers in the Quaternary hemipelagic sediments of the Japan Sea recovered during IODP Expedition 346. *Progress in Earth and Planetary Science*, 5, 19. doi: 10.1186/s40645-018-0167-8
10. **Dunlea, A. G.**, R. W. Murray, D. P. Santiago Ramos, and J. A. Higgins (2017) Cenozoic global cooling and increased seawater Mg/Ca via reduced reverse weathering. *Nature Communications*, 8, 844. doi:10.1038/s41467-017-00853-5
9. De Vleeschouwer, D., **A. G. Dunlea**, G. Auer, C. H. Anderson, H. Brumsack, A. de Loach, M. C. Gurnis, Y. Huh, T. Ishiwa, K. Jang, M. A. Kominz, C. März, B. Schnetger, R. W. Murray, H. Pälike, and Expedition 356 shipboard scientists (2016) Quantifying K, U and Th concentrations of marine sediments using shipboard natural gamma radiation spectra measured on *RV JOIDES Resolution*. *Geochemistry, Geophysics, Geosystems*, 18, doi:10.1002/2016GC006715
 - Top 20 most downloaded paper in *Geochemistry, Geophysics, Geosystems* in 2017-2018
8. Lyle, M., R. A. Pockalny, P. J. Polissar, J. Lynch-Stieglitz, C. Ravelo, S. Bova, **A. G. Dunlea**, H. Ford, J. Herzberg, S. Hovan, A. Jacobel, C. King Wertman, A. Maloney, R. W. Murray, J. Shackford Wilson, K. Wejnert, R. Xie (2016) Dynamic carbonate sedimentation on the Northern Line Islands Ridge, Palmyra Basin. *Marine Geology*, 379, 194-207. doi: 10.1016/j.margeo.2016.06.005
7. Dzaugis, M. E., A. J. Spivack, **A. G. Dunlea**, R. W. Murray, S. D'Hondt (2016) Radiolytic hydrogen production in the subseafloor basaltic aquifer. *Frontiers in Microbiology*, 7, doi: 10.3389/fmicb.2016.00076
6. Adhikari, R. R., C. Glombitza, J. C. Nickel, C. H. Anderson, **A. G. Dunlea**, A. J. Spivack, R. W. Murray, S. D'Hondt (2016) Hydrogen utilization potential in subsurface sediment. *Frontiers in Microbiology*, 7, doi: 10.3389/fmicb.2016.00008
5. **Dunlea, A. G.**, and R. W. Murray (2015) Optimization of end-members used in multiple linear regression geochemical mixing models. *Geochemistry, Geophysics, Geosystems*, 16, 4021-4027. doi: 10.1002/2015GC006132
4. **Dunlea, A. G.**, R. W. Murray, J. Sauvage, R. A. Pockalny, A. J. Spivack, R. N. Harris, and S. D'Hondt (2015) Cobalt-based age models of pelagic clay in the South Pacific Gyre. *Geochemistry, Geophysics, Geosystems*, 16, 2694-2710. doi: 10.1002/2015GC005892
3. **Dunlea, A. G.**, R. W. Murray, J. Sauvage, A. J. Spivack, R. N. Harris, and S. D'Hondt (2015) Dust, volcanic ash, and the evolution of the South Pacific Gyre through the Cenozoic. *Paleoceanography*, 30, 1078-1099. doi: 10.1002/2015PA002829
2. Lynch-Stieglitz, J., P. J. Polissar, A. Jacobel, S. Hovan, R. A. Pockalny, M. Lyle, R. W. Murray, C. Ravelo, S. Bova, V. Castro, **A. G. Dunlea**, H. Ford, J. Herzberg, C. King, A. Maloney, J. Shackford, K. Wejnert, R. Xie (2015) Glacial-Interglacial Changes in Central Tropical Pacific Surface Seawater Property Gradients. *Paleoceanography*, 30, 423-438. doi: 10.1002/2014PA002746
1. **Dunlea, A. G.**, R. W. Murray, R. N. Harris, M. A. Vasiliev, H. Evans, A. J. Spivack, and S. D'Hondt (2013) Assessment and use of NGR instrumentation on the *JOIDES Resolution* to quantify U, Th, and K concentrations in marine sediment. *Scientific Drilling*, 15, 57-63. doi:10.2204/iodp.sd.15.05.2013

OTHER PUBLICATIONS

4. Wolfgang, K., A. Holbourn, J. Schönfeld, K. Lindhorst, S. Gallagher, M. Keep, A. Sadekov, **A. G. Dunlea**, S. Clemens, R. Wilkens, M. Sarnthein, T. Leutert, P. Zhang, D. Maicher, R. Manceau, A. Dillon, J. L. Gonzalez, S. Fabian, J. McCaffrey, K. Kochhann, J. Lübbes, J. Jöhnck, J. Hingst, K. Parplies, M. Koppe, S. Steffen, J. Schultz, S. Heinrich, T. Averages, F. Evers (2018) Cruise report Sonne 257, WACHEIO - Western Australian Climate History from Eastern Indian Ocean Sediment Archives, Darwin - Fremantle, May 12, 2017 - June 04, 2017. *Institut für Geowissenschaften, Christian-Albrechts-Universität zu Kiel*, 260 pp, doi: 10.2312/cr_so257
3. McKay, R., N. Exon, D. Mueller, K. Gohl, M. Gurnis, A. Shevenell, S. Henrys, F. Inagaki, D. Pandey, J. Whiteside, T. van de Flierdt, T. Naish, V. Heuer, Y. Morono, M. Coffin, M. Godard, L. Wallace, S. Kodaira, G. Dickens, **A. G. Dunlea**, M. Ikehara, J. Collot, B. Dugan, L. McNeill, I. Pecher, M. Jutzeler, L. Stott, B. Opdyke, S. Naik, R. Hackney, P. Bijl, U. Wortmann, G. Uenzelmann-Neben (2018) Developing community-based scientific priorities and new drilling proposals in the Southern Indian and Southwest Pacific oceans. *Scientific Drilling*, 24, 61-70. doi: 10.5194/sd-24-61-2018
2. Tada, R., R. W. Murray, C. A. Alvarez Zarikian, and the **Expedition 346 Scientists** (2015) *Proceedings of the Integrated Ocean Drilling Program*, 346, College Station, TX, doi:10.2204/iodp.proc.346.2015
1. **Expedition 346 Scientists** (2013) Asian Monsoon: onset and evolution of millennial-scale variability of Asian monsoon and its possible relation with Himalaya and Tibetan Plateau uplift. *Integrated Ocean Drilling Program Preliminary Reports*, 346, doi:10.2204/iodp.pr.346.2014

EXTERNAL FUNDING

“The Southern Ocean’s Iron Cycle through the Cenozoic”		
P.I. Dunlea (lead), Horner, Peucker-Ehrenbrink; <i>NSF MGG</i> ; \$415,531		2019-2021
Participation on IODP Expedition 378, <i>USSSP/IODP</i> , 3 months of salary support		2020
“Land-Ocean Interactions Across the Indian Ocean” Meeting Travel Award, <i>LDEO/USSSP/IODP</i>		2017
Australasian IODP Regional Planning Workshop Travel Award, <i>LDEO/USSSP/IODP</i>		2017
Ocean and Climate Change Institute Postdoctoral Scholarship, <i>WHOI</i> \$94,000		2016 – 2018
Expedition 353 Sampling Party in Kochi, Japan Travel Award, <i>COL</i>		2016
IODP Expedition 346 Second Post-cruise Meeting Travel Award, <i>COL</i>		2016
Urbino Summer School in Paleoclimatology Scholarship, <i>NSF/USSSP</i>		2015
North Atlantic R/V <i>Knorr</i> Expedition Travel Award, <i>Univ. Rhode Island/NSF</i>		2014
346 Post-Expedition Research Award, <i>COL/IODP</i> \$15,000		2014
Expedition 346 Sampling Party in Kochi, Japan Travel Award, <i>COL</i>		2014
IODP Expedition 346 First Post-cruise Meeting Travel Award, <i>COL</i>		2014
Participation on IODP Expedition 346, <i>USSSP/IODP</i> \$10,287		2013
Line Islands Research Cruise Travel Award, <i>Georgia Tech./NSF</i>		2013
Dean’s Fellowship, <i>Boston University</i> \$29,200		2010 – 2011

TEACHING EXPERIENCE

*Woods Hole Oceanographic Institution***Guest Lecturer**, Marine Sediment Spring 2019**Guest Lecturer**, Geological Oceanography (Course 12.710) Fall 2017**Laboratory Mentor**, Co-supervised undergraduate summer fellow research (Logan Tegler) 2017*Boston University***Guest Lecturer**, Marine Biogeochemistry (ES423) Spring 2015**Instructor**, Paleoclimatology and Paleoceanography (ES351, 22 students) Fall 2015**Guest Lecturer**, Marine Geology (ES640) 2013 - 2015**Laboratory Mentor**, Co-advised senior thesis research (Michelle Hulewicz) 2013 - 2014**Teaching Assistant**, Advanced Topics in Marine Geosciences (ES535, 8 students) Fall 2013**Teaching Assistant**, Oceanography of Stellwagen Bank (ES557, 10 students) Fall 2012Undergraduate students sampled seawater from NOAA's *R/V Auk*, analyzed nutrient contents in lab, and completed independent research projects.**Teaching Assistant**, History of the Earth (ES302, 19 students) Spring 2012**Laboratory Mentor**, Trained and supervised 3 undergraduate research assistants 2011 - 2014**Teaching Assistant**, Introduction to Oceanography (ES144, 159 students) Fall 2011*University of Rochester***Teaching Assistant**, Physical and Chemical Hydrology (EES217, 12 students) Spring 2010**Teaching Assistant**, Chemistry of Global Change (EES218, 15 students) Fall 2009**OCEANOGRAPHIC CRUISES (149 DAYS AT SEA)**

Shipboard Scientist. *R/V SONNE*, SO257 West Australian Climate. May – June 2017**MST Specialist**. *R/V Knorr*, KN223 Researcher Ridge. Oct. – Dec. 2014**Inorganic Chemist**. *R/V JOIDES Resolution*, IODP Exp. 346, East Asian Monsoon. Aug. – Sept. 2013**Shipboard Scientist**. *R/V Marcus G. Langseth*, Line Islands Ridge Paleoceanography. May 2012**PROFESSIONAL SERVICES**

Participant, Geochemistry/Microbiology Lab Working Group, 2018-2019
International Ocean Discovery Program (IODP)-*JOIDES Resolution* Science Operator (JRSO)**External Reviewer**, *Geology*; *Nature Scientific Reports*; *Chemical Geology*; 2016-Present
Geochemistry, *Geophysics*, *Geosystems*; *Paleoceanography and Paleoclimatology*;
Journal of The Royal Society of Western Australia; *Near Surface Geophysics*;
Earth, Planets & Space; *Progress in Earth and Planetary Science*; *Geochimica et*
Cosmochimica Acta; *Global Biogeochemical Cycles***External Reviewer**, *American Chemical Society (ACS) Petroleum Research Fund* 2016-Present**Session Co-Chair**, "Authigenic Processes in Marine Sediment: Influence on Seawater Composition and the Paleoceanographic Record." AGU Annual Fall Meeting, San Francisco, CA Dec. 2016**Session Co-Chair**, "Geochemistry and Microbiology of Oxidic and Suboxic Sediment."

AGU Annual Fall Meeting, San Francisco, CA

Dec. 2015

SCIENCE OUTREACH AND COMMUNITY SERVICES

Postdoc Representative , Women's Committee, Woods Hole Oceanographic Institution	2018-2019
Secretary , Postdoctoral Association, Woods Hole Oceanographic Institution	2017-2018
Science Fair Judge , Falmouth Academy Science Fair, Falmouth, MA	2017, 2018
Science Fair Judge , Lawrence Middle School Science Fair, Falmouth, MA	2017
Panelist , Graduate School Application Advice Panel for College Students, Woods Hole, MA	2016
Panelist , Geochemistry Career Panel for High School Students, Boston Univ, Boston, MA	2015
Science Fair Judge , Devotion Elementary School Science Fair, Brookline, MA	2015, 2016
IODP Outreach , National Science Teachers Association Conference.	April 2014
• Promoted awareness of IODP outreach opportunities	
Social Media Team , IODP Expedition 346, Asian Monsoon.	Aug. – Sept. 2013

MEETINGS AND WORKSHOPS

NEXT: Scientific Ocean Drilling Beyond 2023, Denver, CO	May 2019
Asian Monsoon (Expedition 346) Mini-Workshop, WHOI, Woods Hole, MA	Dec. 2018
Northeastern Geobiology Symposium, WHOI, Woods Hole, MA	Apr. 2018
“Land-ocean interactions across the Indian Ocean” USSSP Workshop, Narragansett, RI	July 2017
IODP Australasian Regional Planning Workshop, Sydney, Australia	June 2017
Northeastern Geobiology Symposium, Univ. Connecticut, Storrs, CT	Mar. 2017
Northeastern Geobiology Symposium, Harvard Univ., Cambridge, MA	Apr. 2016
IODP Expedition 346 second post-cruise meeting, Melbourne, Australia	Jan. 2016
Urbino Summer School in Paleoclimatology, Urbino, Italy	July 2015
IODP Expedition 346 editorial meeting, College Station, TX	Jan. 2014
IODP Expedition 329 second post-cruise meeting, Kona, HI	Nov. 2012

INVITED TALKS

17. Relating multi-metal patterns in seawater and sediment across the South Pacific Gyre. Gordan Research Conference, Chemical Oceanography, Holderness, NH.	2019
16. Rethinking the role of the seafloor in ocean chemistry and long-term climate. Massachusetts Institute of Technology, Chemical Oceanography and Geology, Geochemistry, and Geobiology Seminar (COG3), Cambridge, MA.	2019
15. Rethinking the role of the seafloor in ocean chemistry and long-term climate. Woods Hole Oceanographic Institution, Marine Chemistry & Geochemistry, Woods Hole, MA	2019
14. Rethinking the role of the seafloor in ocean chemistry and long-term climate. Royal Netherlands Institute for Sea Research, Department of Ocean Systems, Texel, Netherlands.	2019
13. Rethinking the role of the seafloor in ocean chemistry and long-term climate. Iowa State University, Department of Geological and Atmospheric Sciences, Ames IA.	2019
12. Rethinking the role of the seafloor in ocean chemistry and long-term climate.	2019

University of Minnesota, Department of Earth Sciences, Minneapolis, MN.

11. Rethinking the role of the seafloor in ocean chemistry and long-term climate. 2019
University of Hawaii, Department of Oceanography, Honolulu, HI.
10. Rethinking the role of the seafloor in ocean chemistry and long-term climate. 2018
University of Southern California, Department of Earth Sciences, Los Angeles, CA.
9. Cenozoic global cooling and increased seawater Mg/Ca via reduced reverse weathering. 2018
University of South Florida, College of Marine Sciences, St. Petersburg, FL.
8. A 6 million-year biomarker record of monsoon rains and vegetation on the Indian Peninsula. 2018
Goldschmidt Conference. Boston, MA.
7. Cenozoic global cooling and increased seawater Mg/Ca via reduced reverse weathering 2018
Lamont-Doherty Earth Observatory, Palisades, NY.
6. Reconstructing the behavior of the Indian Monsoon since the late Miocene. 2018
University of Massachusetts-Amherst, Department of Geosciences, Amherst, MA.
5. Cenozoic global cooling and increased seawater Mg/Ca via reduced reverse weathering 2017
Woods Hole Oceanographic Institution, Geology & Geophysics, Woods Hole, MA.
4. Cenozoic global cooling and increased seawater Mg/Ca via reduced reverse weathering 2017
Rutgers University, Department of Marine and Coastal Sciences, New Brunswick, NJ.
3. Monsoon related provenance changes in sediment of the Sea of Japan from Miocene to present. 2016
University of Tokyo, Department of Earth and Planetary Science, Tokyo, Japan.
2. Dust, volcanic ash, and Southern Hemisphere climate through the Cenozoic. 2015
University of New Hampshire, Department of Earth Sciences, Durham, NH.
1. Dating South Pacific Gyre pelagic clays with the “constant” cobalt technique. 2013
University of Rhode Island, Graduate School of Oceanography, Narragansett, RI.

ABSTRACTS AND PRESENTATIONS

*asterisk denotes student advisee

38. **Dunlea, A. G.**, C. H. Anderson, R. W. Murray, R. Tada, C. A. Alvarez-Zarikian, L. Giosan, T. Gorgas, H. Zheng, L. Peterson, M. Ziegler, and Expedition 346 Scientists (2018) Inter-lab XRF scanning comparison and calibration. Asian Monsoon (Expedition 346) Mini-Workshop. Woods Hole Oceanographic Institution, Woods Hole, MA.
37. Anderson, C. H., **A. G. Dunlea**, R. W. Murray, L. Giosan, C. W. Kinsley, D. McGee, and R. Tada (2018) Reconstructing the East Asian Monsoon from Provenance of Marine Sediment in the Ulleung Basin. AGU Annual Fall Meeting, Washington D.C.
36. Giosan, L., W. D. Orsi, M. Coolen, C. Wutcher, **A. G. Dunlea**, K. Thirumalai, S. E. Munoz, P. D. Clift, J. P. Donnelly, V. Galy, D. Q. Fuller (2018) Neoglacial Climate Anomalies and the Indus Civilization’s Metamorphosis. AGU Annual Fall Meeting, Washington D.C.
35. **Dunlea, A. G.** (2018) The role of sediment-seawater interactions in global element budgets and long-term climate. Woods Hole Oceanographic Institution, Marine Chemistry & Geochemistry, Woods Hole, MA. (oral)
34. **Dunlea, A. G.**, L. Giosan, Y. Huang (2018) A 6 million-year biomarker record of monsoon rains and vegetation on the Indian Peninsula. Goldschmidt Conference. Boston, MA.
33. Kinsley, C. W., D. McGee, C. H. Anderson, **A. G. Dunlea**, R. W. Murray, L. Giosan, R. Tada (2018) Isolating the eolian component of Japan Sea sediments (IODP Site U1430) for radiogenic isotope provenance studies. Goldschmidt Conference. Boston, MA.

32. Anderson, C. H., R. W. Murray, **A. G. Dunlea**, L. Giosan, C. W. Kinsley, D. McGee, R. Tada (2018) Resolving the provenance of marine sediment in the Ulleung Basin to reconstruct the East Asian Monsoon. Goldschmidt Conference. Boston, MA.
31. *Tegler, L., **A. G. Dunlea**, S. Romaniello, A. Anbar, T. Horner (2018) More clear than mud: Dating deep-sea clays with osmium isotopes to unravel seawater metal cycling through the Cenozoic. Ocean Sciences Meeting, Portland, OR.
30. **Dunlea, A. G.**, R. W. Murray, D. P. Santiago Ramos, and J. A. Higgins (2018) Reorganization of biogenic Si burial decreased reverse weathering, increased seawater Mg/Ca, and cooled Earth over the past 65 million years. Ocean Sciences Meeting, Portland, OR. (oral)
29. Anderson, C. H., **A. G. Dunlea**, R. W. Murray, R. Tada, C. A. Alvarez-Zarikian and Expedition 346 Scientists (2017) Reconstructing eolian delivery to the Ulleung Basin (IODP Site U1430) over the past 12 Myr. AGU Annual Fall Meeting, New Orleans, LA.
28. Anderson, C. H., R. P. Scudder, **A. G. Dunlea**, R. W. Murray (2017) Geochemical unmixing of multiple sources of aluminosilicates in marine sediment cores with multivariate statistics. Goldschmidt Conference, Paris, France.
27. De Vleeschouwer, D., **A. G. Dunlea**, G. Auer, C. H. Anderson, H. Brumsack, A. de Loac, M. C. Gurnis, Y. Huh, T. Ishiwa, K. Jang, M. A. Kominz, C. März, B. Schnetger, R. W. Murray, H. Pälike, and IODP Expedition 356 shipboard scientists (2017) Quantifying K, U and Th contents of marine sediments using shipboard natural gamma radiation spectra measured on DV JOIDES Resolution. EGU General Assembly, Vienna, Austria.
26. **Dunlea, A. G.**, L. Giosan, Y. Huang, (2017) Sediment provenance and leaf wax $\delta^{13}\text{C}$ and δD at Site U1445 in the Bay of Bengal to track the Indian Monsoon 0-6 Ma. USSP Workshop "Land-ocean interactions across the Indian Ocean: toward regional integration of recent drilling results," Narragansett, RI. (oral)
25. Santiago Ramos, D. P., **A. G. Dunlea**, and J. A. Higgins (2016) Paired measurements of K and Mg isotopes and clay authigenesis in marine sediments. AGU Annual Fall Meeting, San Francisco, CA.
24. **Dunlea, A. G.**, R. W. Murray, D. P. Santiago Ramos, and J. A. Higgins, (2016) Deep sea authigenic clays as a sink for seawater Mg through the Cenozoic. AGU Annual Fall Meeting, San Francisco, CA. (poster)
23. Anderson, C. H., **A. G. Dunlea**, R. W. Murray, R. Tada, C. A. Alvarez-Zarikian and Expedition 346 Scientists (2016) Provenance of Continental Margin Sediments in the East China Sea, Results from IODP Expedition 346. AGU Annual Fall Meeting, San Francisco, CA.
22. Anderson, C. H., **A. G. Dunlea**, R. W. Murray, C. W. Kinsley, D. McGee, L. Giosan, H. Zheng, R. Tada, C. A. Alvarez-Zarikian and Expedition 346 Scientists (2016) Tracking monsoon related provenance changes in the Japan Sea/East Sea/East China Sea. IODP Expedition 346 Second Post-cruise meeting, Melbourne, Australia.
21. Kinsley, C. W., I. Tal, D. McGee, L. Giosan, C. H. Anderson, **A. G. Dunlea**, R. W. Murray (2016) Initial results for Pb, Nd, and Sr isotopes for provenance work on bulk terrigenous fraction from Site U1430. IODP Expedition 346 Second Post-cruise meeting, Melbourne, Australia.
20. **Dunlea A. G.**, C. H. Anderson, R. W. Murray, R. Tada, C. A. Alvarez-Zarikian, L. Giosan, T. Gorgas, H. Zheng, L. Peterson, M. Ziegler, and Expedition 346 Scientists (2016) International inter-lab, inter-instrument XRF scanning comparison and calibration. IODP Expedition 346 Second Post-cruise meeting, Melbourne, Australia. (oral)
19. McKinley C. C., **A. G. Dunlea**, R. W. Murray, D. J. Thomas (2015) Down Core Fidelity of

Authigenic Oxyhydroxides Coatings: Tracing Paleogene Water Mass Evolution. AGU Annual Fall Meeting, San Francisco, CA.

18. Dzaugis M. E., A. J. Spivack, **A. G. Dunlea**, R. W. Murray, S. D'Hondt (2015) Radiolytic hydrogen production in the South Pacific Gyre subseafloor basaltic aquifer. AGU Annual Fall Meeting, San Francisco, CA.
17. Sauvage J., A. J. Spivack, **A. G. Dunlea**, R. W. Murray, and S. D'Hondt (2015) Sedimentary Catalysis of Radiolytic H₂ Production, and Implications for Subseafloor Life. AGU Annual Fall Meeting, San Francisco, CA.
16. **Dunlea, A. G.**, R. W. Murray, J. Sauvage, A. J. Spivack, R. N. Harris, S. D'Hondt, and J. A. Higgins, (2015) Dust, Volcanic Ash, and the Evolution of the South Pacific Gyre. AGU Annual Fall Meeting, San Francisco, CA. (poster)
15. Anderson C. H., **A. G. Dunlea**, R. W. Murray, C. W. Kinsley, D. McGee, L. Giosan, H. Zheng, R. Tada, C.A. Alvarez-Zarikian (2014) Tracking Monsoon Related Provenance Changes in Continental Margin Sediments of the East China Sea: Preliminary Results from IODP Expedition 346. AGU Annual Fall Meeting, San Francisco, CA.
14. Sauvage J., D. Graham, A. J. Spivack, **A. G. Dunlea**, R. W. Murray, and S. D'Hondt (2014) Boosting subsurface life: is subseafloor sediment a natural catalyst for radiolytic hydrogen production?. AGU Annual Fall Meeting, San Francisco, CA.

• *Selected as “Outstanding Student Presentation”, Fall 2014, AGU Meeting.*

13. Ireland T.J., R. P. Scudder, **A. G. Dunlea**, C. H. Anderson, R. W. Murray (2014) Assessing the Accuracy and Precision of Inorganic Geochemical Data Produced through Flux Fusion and Acid Digestion: Multiple (60+) Comprehensive Analyses of BHVO-2 and the Development of Improved “Accepted” Values. AGU Annual Fall Meeting, San Francisco, CA.
12. **Dunlea A. G.**, R. W. Murray, J. Sauvage, A. J. Spivack, R. N. Harris, and S. D'Hondt, (2014) Paleooceanography in Pelagic Clay of the South Pacific Gyre. AGU Annual Fall Meeting, San Francisco, CA. (poster)
11. Dickens, G., C. W. Kinsley, **A. G. Dunlea**, W. Anderson, M. Gurgel, K. Lee, R. W. Murray, R. Tada, C. A. Alvarez-Zarikian, and Expedition 346 Scientific Party (2014) Carbon and sulfur cycling in shallowly buried sediment of the Japan Sea/East Sea. Japan Geoscience Union Annual Meeting, Yokohama, Japan. Invited.
10. Murray R. W., R. P. Scudder, **A. G. Dunlea**, K. Ikehara, T. Irino, R. Tada, C. A. Alvarez-Zarikian, J. C. Schindlbeck, S. Kutterolf, and Expedition 346 Scientific Party (2014) The “missing volcanic record” captured by dispersed ash in sediment of the Japan Sea/East Sea and NW Pacific Ocean. Japan Geoscience Union Annual Meeting, Yokohama, Japan. Invited.
9. Dzaugis M. E., A. J. Spivack, **A. G. Dunlea**, R. W. Murray, K. A. Kelley, S. D'Hondt (2013) Radiolytic hydrogen production in basaltic basement of the South Pacific Gyre. AGU Annual Fall Meeting, San Francisco, CA.
8. **Dunlea A. G.**, R. W. Murray, J. Sauvage, A. J. Spivack, R. N. Harris, and S. D'Hondt, (2013) Cenozoic sedimentation rates and provenance variations in the South Pacific Gyre. AGU Annual Fall Meeting, San Francisco, CA. (poster)
7. Lee K. E., W. T. Anderson, G. Dickens, **A. G. Dunlea**, M. Gurgel, C. W. Kinsley, R. Tada, R.W. Murray, C.A. Alvarez-Zarikian, and the Expedition 346 Science Party (2013) Shipboard geochemistry program of IODP Expedition 346. Geol. Society of Korea Annual Meeting.
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