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Associate Scientist, The Josephine Bay Paul Center for Comparative Molecular Biology and Evolution,  
Marine Biological Laboratory, Woods Hole, MA USA  
Associate Professor, Department of Geological Sciences, Department of Ecology and Evolutionary  
Biology, Brown University, Providence, RI, USA

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## 3. Education

Sc.B., 1990 Brown University, Providence, Rhode Island, Aquatic Biology

Ph.D., 1996 Massachusetts Institute of Technology/Woods Hole Oceanographic Institution,  
Cambridge/Woods Hole, Massachusetts, Biological Oceanography Advisor: David Caron.  
Thesis: A Molecular Approach to Questions in the Phylogeny of Planktonic Sarcodines

## 4. Professional appointments

1996-1998	Postdoctoral Scientist Marine Biological Laboratory, Woods Hole, Massachusetts Advisor: Mitchell Sogin. Molecular Phylogeny of Eukaryotes
1998-2000	NIH NRSA Postdoctoral Fellow Marine Biological Laboratory, Woods Hole, Massachusetts Advisor: Mitchell Sogin. Eukaryotic Life in Alkaline and Acidic Environments
2000-2002	Staff Scientist I Bay Paul Center, Marine Biological Laboratory, Woods Hole, Massachusetts
2000	Adjunct Associate Research Scientist Lamont-Doherty Earth Observatory, New York
2002-2007	Staff Scientist II / Assistant Research Scientist Bay Paul Center, Marine Biological Laboratory, Woods Hole, Massachusetts
2005-2013	Assistant Professor in the Ecology and Evolutionary Biology Department in the Brown-MBL Joint Graduate Program
2007-2009	Associate Research Scientist, Bay Paul Center, Marine Biological Laboratory, Woods Hole, Massachusetts
2009-2012	Assistant Scientist (Track 1) Bay Paul Center, Marine Biological Laboratory, Woods Hole, Massachusetts
2010-2013	Assistant Professor, Department of Geological Sciences, Brown University, Providence, RI
2012-present	Associate Scientist, (Track 1) Bay Paul Center, Marine Biological Laboratory, Woods Hole, Massachusetts
2014	Associate Professor, Department of Geological Sciences, Brown University, Providence, RI

## 5. Completed publications

a. *Books/monographs* – N/A

b. *Chapters in books*

Amlis R., González-Toril E., Gómez F., Fernández-Remolar D., Rodríguez N., Malki M., Aguilera A., and **Amaral-Zettler, L. A.** 2004. Importance of chemolithotrophy for early life on Earth: the Tinto River (Iberian Pyritic Belt) case. In: Origins. J. Seckbach (ed.) Kluwer Publishers, The Netherlands. 463-480.

Aguilera, A., **Amaral Zettler, L. A.**, Souza-Egipsy, V., Zettler, E., and Amlis, R. 2007. Eukaryotic community structure from Rio Tinto (SW, Spain), a highly acidic river In: (ed. Seckbach, J.), Cellular Origin, Life in Extreme Habitats and Astrobiology, Algae and Cyanobacteria in Extreme Environments. Springer Netherlands. p. 465-485.

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- c. *Refereed journal articles* \*(corresponding author)
- Caron, D. A., Sanders, R. W., Lim, E. L., Marrasé, C., **Amaral, L. A.**, Whitney, S., Aoki, R. B. & Porter, K. G. 1993. Light-dependent phagotrophy in the freshwater mixotrophic chrysophyte *Dinobryon cylindricum*. *Microbial Ecology* 25: 93-111.
- Lim, E. L., **Amaral, L. A.**, Caron, D. A., & DeLong, E.F. 1993. Application of rRNA-based probes for observing marine nanoplanktonic protists. *Applied and Environmental Microbiology* 59(5): 1647-1655.
- Amaral Zettler, L. A.**, Sogin, M. L. & Caron, D. A. 1997. Phylogenetic relationships between the Acantharea and the Polycystinea: A molecular perspective on Haeckel's Radiolaria. *Proceedings of the National Academy of Sciences* 94: 11411-11416.
- Amaral Zettler, L. A.**, Anderson, O. R., & Caron, D. A. 1998. Insights on the diversity within a "species" of *Thalassicolla* (Spumellarida) based on 16S-like ribosomal RNA gene sequencing. *Journal of Eukaryotic Microbiology* 45(5): 488-49.
- Amaral Zettler, L. A.**, Anderson, O. R., & Caron, D. A. 1999. Towards a molecular phylogeny of colonial spumellarian radiolaria. *Marine Micropaleontology* 36: 67-79.
- Anderson, O. R., Gastrich, M. D. & **Amaral Zettler, L. A.** 1999. Fine structure of the colonial radiolarian *Collozoum serpentinum* (Polycystinea: Spumellarida) with consideration of its taxonomic status and the recommendation for the reestablishment of the genus *Collophidium* (Haeckel). *Marine Micropaleontology* 36: 81-89.
- Amaral Zettler, L. A.** & Caron, D. A. 2000. New insights into the phylogeny of the Acantharea based on SSU rRNA gene sequencing. *European Journal of Protistology* 36: 34-39.
- Amaral Zettler, L. A.**, Nerad, T. A., O'Kelly, C. J., Peglar, M. T., Gillevet, P. M., Silberman, J. D., & Sogin, M. L. 2000. A molecular reassessment of the Leptomyxid amoebae. *Protist* 151: 275-282.
- Amaral Zettler, L. A.**, Nerad, T. A., O'Kelly, C. J., & Sogin, M. L. 2001. The nucleariid amoebae: more protists at the animal-fungal boundary. *Journal of Eukaryotic Microbiology* 48(3): 293-297.
- Edgcomb, V. P., Simpson, A. G. B., **Amaral Zettler, L. A.**, Nerad, T. A., Patterson, D. J., & Sogin, M. L. 2002. Pelobionts are degenerate protists: Insights from morphology and molecules. *Molecular Biology and Evolution* 19: 978-982.
- Amaral Zettler, L. A.**, Gómez, F., Zettler, E. R., Keenan, B. G., Amils, R. & Sogin, M. L. 2002. Eukaryotic diversity in Spain's River of Fire. *Nature* 417: 137.
- Amaral Zettler, L. A.**, Messerli, M. A., Laatsch, A. D., Smith, P. J. S., & Sogin, M. L. 2003. From genes to genomes: Beyond biodiversity in Spain's Rio Tinto. *Biological Bulletin* 204: 205-209.
- Peglar, M. T., **Amaral Zettler, L. A.**, Anderson, O. R., Nerad, T. A., Gillevet, P. M., Mullen, T. E., Frasca, S. Jr., Silberman, J. D., O'Kelly, C. J., & Sogin, M. L. 2003. Two new small-subunit ribosomal RNA gene lineages within the subclass Gymnamoebia. *Journal of Eukaryotic Microbiology* 50(3): 224-232.
- O'Kelly, C. J., Silberman, J. D., **Amaral Zettler, L. A.**, Nerad, T. A. and Sogin, M. L.. 2003. *Monopylocystis visvesvarai* n. gen., n. sp. and *Sawyeria marylandensis* n. gen., n. sp.: Two new amitochondrial heterolobosean amoebae from anoxic environments. *Protist* 154: 281-290.
- Medina, M., Collins, A.G., Taylor, J.W., Valentine, J.W., Lipps, J.H., **Amaral Zettler, L.A.**, and Sogin, M.L., 2003. Phylogeny of Opisthokonta and the evolution of multicellularity and complexity in Fungi and Metazoa. *International Journal of Astrobiology* 2(3):203-211.
- Amaral-Zettler, L. A.\***, Laatsch, A. D., Zettler, E., Nerad, T. A., Cole, J., Chavarria Diaz, F., Diaz, J., Janzen, D. H., Sittenfeld, A., Mason, O., Reysenbach, A-L., 2005. A microbial observatory of caterpillars: Isolation and molecular characterization of protists associated with the saturniid moth caterpillar *Rothschildia lebeau*. *Journal of Eukaryotic Microbiology* 52(2): 107-115.
- Messerli, M. A., **Amaral Zettler, L. A.**, Zettler, E. Jung, S-K, Smith, P. J. S. & M. L. Sogin. 2005. Life at acidic pH imposes an increased energetic cost for a Eukaryotic Acidophile. *Journal of Experimental Biology*. 208(13): 2569-2579.

- Amaral-Zettler, L. A.\***, Cole, J., Laatsch, A. D., Nerad, T. A., Anderson, O. R. & Reysenbach, A-L. 2006. *Vannella epipetala* n. sp. isolated from the leaf surface of *Spondias mombin* (Anacardiaceae) growing in the dry forest of Costa Rica. *Journal of Eukaryotic Microbiology*. 53(6):522-530.
- D'Andrea, W. J., Lage, M., Martiny, J. B. H., Laatsch, A.D., **Amaral-Zettler, L. A.**, Sogin, M. L., and Huang, Y. 2006. Alkenone producers inferred from well-preserved 18S rDNA in Greenland lake sediments. *Journal of Geophysical Research* 111, G03013, doi:10.1029/2005JG000121.
- Hutchison, L. Mustard, J., Gendrin, A., Fernández-Remolar, D., Amils, R., and **Amaral-Zettler, L.** 2006. Finding mineralogically interesting targets for exploration from spatially coarse visible and near IR spectra. *Earth and Planetary Science Letters*. 252: 201-214.
- Aguilera, A., Zettler, E., Gomez, F., **Amaral-Zettler, L.**, Rodriguez, N. and R. Amils. 2007. Distribution and seasonal variability in the benthic eukaryotic community of Rio Tinto (SW, Spain), an acidic, high metal extreme environment. *Systematic and Applied Microbiology* 30: 531-546.
- Sinigalliano, C.D., Gidley, M.L., Shibata, T., Whitman, D., Dixon, T.H., Laws, E., Hou, A., Bachoon, D., Brand, L., **Amaral-Zettler, L.**, Gast, R., Steward, G. F., Nigro, O. D., Fujioka, R., Betancourt, W.Q., Vithanage, G., Mathews, J., Fleming, L.E., Solo-Gabriele, H. M. 2007. Impacts of Hurricane Katrina on the microbial landscape of the New Orleans area. *PNAS*. 104 (21): 9029-9034 doi:10.1073/pnas.0610552104
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- Amaral-Zettler, L. A.\***, Zettler, E. R., Theroux, S. M., Palacios, C., Aguilera, A. and Amils, R. Microbial community structure across the tree of life in the extreme Río Tinto. 2010. *ISME Journal*. doi:10.1038/ismej.2010.101.
- Gast, R. J., Moran, D. M., Dennett, M. R., Wurtsbaugh, W. A., **Amaral-Zettler, L. A.** 2010. Amoebae and pathogenic *Legionella pneumophila* in saline environments. *Journal of Water and Health*. doi:10.2166/wh.2010.
- Theroux, S., D'Andrea, W.J., Toney, J., **Amaral-Zettler, L.**, Huang, Y. 2010. Phylogenetic diversity and evolutionary relatedness of alkenone-producing haptophyte algae in lakes: Implications for continental paleotemperature reconstructions. *Earth and Planetary Science Letters* 300: 311–320.
- Nuzzio, D. B., Zettler, E., Aguilera, A., **Amaral-Zettler, L.\*** 2011. A direct *in situ* fingerprinting method for acid rock drainage using voltammetric techniques with a single renewable gold microelectrode *Science of the Total Environment* 409: 1984-1989.
- Nelson, C. E., Alldredge, A. L., McCliment, E. A., **Amaral-Zettler, L. A.**, Carlson, C. A. 2011. Depleted dissolved organic carbon and distinct bacterial communities in the water column of a rapidly flushing coral reef ecosystem. *ISME Journal* doi:10.1038/ismej.2011.12.
- Yilmaz, P., Gilbert, J., Knight, R., **Amaral-Zettler, L.**, Karsch-Mizrachi, I., Chochrane, G., Nakamura, Y., Sansone, S. A., Oliver Glockner, F., Field, D. 2011. The genomic standards consortium: bringing standards to life for microbial ecology. *ISME Journal* 5: 1565-1567.

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- Yilmaz, P., Kottmann, R., Field, D., Knight, R., Cole, J. A., **Amaral-Zettler, L. A. et al.** 2011. The "Minimum Information about a MARKer gene Sequence" (MIMARKS) specification. *Nature Biotechnology* 29: 415-420.
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- Zinger, L., **Amaral-Zettler, L. A.**, Fuhrman, J. A., Horner-Devine, M. C., Huse, S. M., Mark Welch, D. B., Martiny, J. B. H., Sogin, M., Boetius, A., Ramette, A. 2011. Global patterns of bacterial beta-diversity in seafloor and seawater ecosystems. *PLoS ONE* 6(9): e24570.
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- Sansone, S-A., Rocca-Serra, P., Field, D., Maguire, E., Taylor, C., Hofmann, O., Fang, H., Neumann, S., Tong, W., **Amaral-Zettler, L. et al.**, 2012. Towards interoperable bioscience data. *Nature Genetics*, 44:121-126.
- Crump, B. C., **Amaral-Zettler, L. A.**, and Kling, G. W. Inoculation of microbes from soils structures diversity in arctic streams and lakes. *The ISME Journal advance online publication*, 1 March 2012; doi:10.1038/ismej.2012.9.
- Davies, N., Meyer, C., Gilbert, J.A., **Amaral-Zettler, L.A.**, Deck, J., Bicak, M., Rocca-Serra, P., Assunta-Sansone, S., Willis, K., Field, D. 2012. A call for an international network of genomic observatories (GOs). *GigaScience*1:5.
- Smith, K. F., Schmidt, V., Rosen, G. E., **Amaral-Zettler, L. A.\*** 2012. Microbial diversity and potential pathogens in ornamental fish aquarium water. *PLoS ONE* 7: e39971.
- Amend, A. S., Oliver, T. A., **Amaral-Zettler, L. A.**, Boetius, A., Fuhrman, J. A., Horner-Devine, M. C., Huse, S. M., Mark Welch, D. B., Martiny, A. C., Ramette, A., Lucie Zinger, L., Sogin, M. L., Martiny, J. H. 2012. Macroecological patterns of marine bacteria on a global scale. *Journal of Biogeography*. DOI: 10.1111/jbi.12034.
- Theroux, S., Huang, Y., **Amaral-Zettler, L. A.\*** 2012. Comparative molecular microbial ecology at the peak of a haptophyte bloom in a Greenland arctic oligosaline lake. *Frontiers in Microbiology*. DOI: 10.3389/fmicb.2012.00415.
- Sul, W. J., Oliver, T. A., Ducklow, H. W., **Amaral-Zettler, L. A.\***, Sogin, M.L. 2013. Marine bacteria exhibit a bipolar distribution. *PNAS*. doi:10.1073/pnas.1212424110.
- Amaral-Zettler, L.** 2013. Eukaryotic diversity at pH extremes. *Frontiers in Microbiology*. 3: 1-17. doi: 10.3389/fmicb.2012.00441.
- Duffy, J. E., **Amaral-Zettler, L. A.**, Fautin, D. G., Paulay, G., Ryneerson, T. A., Sosik, H. M., Stachowicz, J. J. 2013. Envisioning a national marine biodiversity observation network. *BioScience*. 63: 350–361.
- Theroux, S., Toney, J., **Amaral-Zettler, L. A.**, Huang, Y. 2013. Production and temperature sensitivity of long chain alkenones in the cultured haptophyte *Pseudoisochrysis paradoxa*. *Organic Geochemistry*. 62:68–73.
- Zettler, E.R.<sup>§</sup>, Mincer, T.<sup>§</sup>, **Amaral-Zettler, L.A.\***<sup>§</sup> 2013. Life in the "Plastisphere": Microbial communities on plastic marine debris. *Environmental Science and Technology*. 47: 7137-7146. (°contributed equally).
- Feehery, G.R., Yigit, E., Oyola, S.O., Langhorst, B.W., Schmidt, V., Stewart, F., Dimalanta, E.T., **Amaral-Zettler, L. A.**, Davis, T., Quail, M., Pradhan, S. 2013. A method for selectively enriching microbial DNA from contaminating vertebrate host DNA. *PLoS ONE* 8(10): e76096. doi:10.1371/journal.pone.0076096
- Vick-Majors, T., Priscu, J. C., **Amaral-Zettler L. A.\*** Modular community structure suggests metabolic plasticity during the transition to polar night in ice-covered Antarctic lakes. *The ISME Journal* advance online publication, 24 October 2013; doi:10.1038/ismej.2013.190

- Davies, N., Field, D., **Amaral-Zettler, L. A.**, et al., 2014. The founding charter of the Genomic Observatories Network. *GigaScience* 3:2.
- Halliday, E., McLellan, S. L., **Amaral-Zettler, L.A.**, Sogin, M.L., Gast, R.J. 2014. Comparison of bacterial communities in sands and water at beaches with bacterial water quality violations. *PLoS ONE*. DOI: 10.1371/journal.pone.009081
- Luria, C. M., Ducklow, H. W., **Amaral-Zettler, L. A.\***, 2014. Marine bacterial, archaeal and eukaryotic diversity and community structure on the continental shelf of the Western Antarctic Peninsula. *Aquatic Microbial Ecology*. DOI: 10.3354/ame01703.
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- d. *Non-refereed journal articles*
- Amaral Zettler, L. A.** Anderson, O. R., Nerad, T. A., and Sogin, M. L. 2001. The phylogenetic position of *Comandonia operculata* and its implications for the taxonomy of the genus *Acanthamoeba*. Eds. S-Billot-Bonef, P. A. Cabanes, F. Marciano-Cabral, P. Pernin, & E. Pringuez. IX<sup>th</sup> International Meeting on the Biology and Pathogenicity of Free-Living Amoebae Proceedings, Paris 8-14 July, 2001. John Libbey Eurotext, Paris. 235-242.
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- e. *Book reviews – N/A*
- f. *Abstracts*
- Zettler, E. R., **Amaral Zettler, L. A.**, Amils, R., Meyer, A., Sogin, M. L. "Effects of metal concentration and pH on growth of photosynthetic protists isolated from the acidic, high-metal Rio Tinto, Spain." North East Algal Symposium, Avery Point, CT, April 23-25, 2004.
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- Amaral-Zettler, L. A.**, Sogin, M. L., de Leeuw, J. W., Patterson, D. J., Schouten, S., Stal, L. J., Herndl, G. ICoMM, The International Census of Marine Microbes: Unveiling the Ocean's hidden majority. 107<sup>th</sup> General Meeting of the American Society for Microbiology in Toronto, May 21-25, 2007.
- Amaral-Zettler, L. A.** The International Census of Marine Microbes and marine protists. International Society of Protistologists and Phycological Society of America Joint Meeting in Warwick, Rhode Island, August 5-10, 2007.
- Zettler, E., Amils, R., Theroux, S., Palacios, C., Sogin, M., **Amaral-Zettler, L.** Protistan distribution in relation to spatial variations of extreme geochemical parameters in the Rio Tinto, Spain. International Society of Protistologists and Phycological Society of America Joint Meeting in Warwick, Rhode Island, August 5-10, 2007.
- Amaral-Zettler, L. A.**, Sogin, M. L., de Leeuw, J. W., Patterson, D. J., Schouten, S., Stal, L. J., Herndl, G. J., Huse, S., and Neal, P. ICoMM, the International Census of Marine Microbes: Unveiling the Ocean's hidden majority. Ocean Biodiversity Informatics Meeting, Halifax, Canada, October 2-5. 2007.
- Amaral-Zettler, L. A.**, Sogin, M. L., de Leeuw, J. W., Patterson, D. J., Schouten, S., Stal, L. J., Herndl, G., ICoMM, the International Census of Marine Microbes: Unveiling the Ocean's hidden majority. Ocean Sciences Meeting, Orlando Florida, March 5, 2008.

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- Amaral-Zettler, L.A.** and Elizabeth McCliment. MIRADA LTERs: Microbial Inventory Research Across Diverse Aquatic LTERs, International Society for Microbial Ecology Conference, Cairns, Australia, August 17-22, 2008.
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- Theroux, S., **Amaral-Zettler, L. A.**, Huang, Y. 2009. Haptophyte alga from Greenland lakes offers unprecedented opportunity for decipher alkenone biosynthetic pathways and functionality. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract PP41C-1531.
- Countway, P. D., **Amaral-Zettler, L. A.**, Heidelberg, K. B., Nelson, W. C., Cary, S. C., Gast, R. J., Sherr, B. F., Sherr, E. B. and Caron, D. A. 2010. Global protistan diversity and biogeography: Part II. Insights from high-throughput sequencing approaches, ASLO Ocean Sciences Meeting, Portland Orego, Feb 22-26, 2010.
- Caron, D.A., **Amaral-Zettler, L. A.**, Heidelberg, K. B., Nelson, W. C., Cary, S. C., Gast, R. J., Sherr, B. F., Sherr, E. B. and Countway, P. D. Global protistan diversity and biogeography: Part I. Where are we today? ASLO Ocean Sciences Meeting, Portland Oregon, Feb 22-26, 2010.
- Zettler, E. R., Aguilera, A., Nuzzio, D., and **Amaral-Zettler, L. A.**, Instrumentation and microcosms to study Rio Tinto microbial communities allow finer scale resolution and manipulations with replicates. *Astrobiology Science Conference*, League City, Texas, April 26-29, 2010.
- Johnson, S. S., **Amaral-Zettler, L. A.**, Haas, B., Amils, R., Carr, C., Ruvkun, G. Metagenomic sequencing of the Rio Tinto. *Astrobiology Science Conference*, League City, Texas, April 26-29, 2010.
- Amaral-Zettler, L. A.**, Zettler, E. R., Amils, R. Pyrotag sequencing across three domains and two seasons unveils the Rio Tinto's 'Rare Biosphere'. *Astrobiology Science Conference*, League City, Texas, April 26-29, 2010.
- McCliment, E. A., Huse, S. M., Witting, J., and **Amaral-Zettler, L. A.** Seasonal microbial community dynamics within the Moorea Coral Reef Long Term Ecological Research site, International Society for Microbial Ecology, Seattle, WA, August 22-27, 2010.
- Amaral-Zettler, L. A.**, McCliment, E. A., Huse, Microbial Inventory Research Across Diverse Aquatic Lters (MIRADA-LTERs): A look at microbial diversity from the Poles to the Tropics, International Society for Microbial Ecology, Seattle, WA, August 22-27, 2010.
- Theroux, S. M., **Amaral-Zettler, L. A.**, Huang, Y., Insights into haptophyte bloom dynamics in an Arctic lake using massively parallel tag sequencing, International Society for Microbial Ecology, Seattle, WA, August 22-27, 2010.
- Zinger, Z., **Amaral-Zettler, L. A.**, Furhman, J., Herndl, G., Horner-Devine, C., Huse, S., Mark Welch, D., Martiny, J., Neal, P., Pedros-Alio, C., Pommier, T., Sogin, M., Boetius, A. and Ramette, A. Global-scale analysis of water column and sediment bacterial communities

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- Steele, J., Xia, L., **Amaral-Zettler, L. A.**, Mark Welch, D., Gilbert, J., Neal, P., Huse, S., Field, D., Zinger, L., Pommier, T., Ramette, A., Boetius, A., Herndl, G., Pedros-Alio, C., Caron, D. A., Horner-Devine, C., Hughes Martiny, J., Naeem, S., Sogin, M., Sun, F., Fuhrman, J., Microbial-environmental networks among Bacteria and Archaea from the ICoMM database, International Society for Microbial Ecology, Seattle, WA, August 22-27, 2010.
- Amaral-Zettler, L. A.**, and Zettler, E. R., Eukaryotic diversity at pH extremes, Extremophiles, Ponta Delgada, Azores, Portugal, Sept 12-16, 2010.
- Amaral-Zettler, L. A.**, Zettler, E. R., Proskurowski, G., Microbial comparison of epibiont communities on *Sargassum* and plastic debris vs. surrounding water in the North Atlantic gyre, 5<sup>th</sup> International Marine Debris Conference, Honolulu, HI, March 22-25, 2011.
- Amaral-Zettler, L. A.**, MIRADA-LTERS- Microbial Inventory Research Across Diverse Aquatic LTERS", LTER Fungal/Microbial Working Group Meeting, June 16-18<sup>th</sup>, 2011, Sevilleta, NM.
- Zettler, E.R., Mincer, T., Proskurowski, G., **Amaral-Zettler, L.A.** "The 'Plastisphere', a new and expanding habitat for marine protists". Joint Meeting of the Phycological Society of America, International Society of Protistologists & Northwest Algal Society, Seattle, WA, 12-16 July 2011.
- Amaral-Zettler, L. A.**, Huse, S., McCliment, E., Booth, M., Carlson, C., Ducklow, H. Guevara, R., Hobbie, J., Palenik, B. The Microbial Inventory Research Across Diverse Aquatic LTERS' (MIRADA-LTERS) contribution to the Census of Marine Microbes, Sept 26-30<sup>th</sup>, 2011, Aberdeen, Scotland.
- Theroux, S. M., Toney, J., Andersen, R., Huang, Y., **Amaral-Zettler, L. A.**, Dynamics of a haptophyte bloom in Lake George, ND: Implications for alkenone-based temperature reconstructions, AGU Fall Meeting Dec 5-9<sup>th</sup>, 2011 San Francisco, CA.
- Amaral-Zettler, L. A.** The promise of 'site-based' research: MIRADA-LTERS project, GSC13, Shenzhen, China, Feb 5-7<sup>th</sup>, 2012.
- Luria, C. M., **Amaral-Zettler, L. A.**, Ducklow, H. W., Repeta, D. J., Rich, J. J., Dissolved organic matter and sea ice dynamics may explain changes in microbial community structure along the Western Antarctic Peninsula, International Symposium on Microbial Ecology 14, Copenhagen, Denmark, Aug 19-24, 2012.
- Sul, W. J., Oliver, T. A., Ducklow, H. W., **Amaral-Zettler, L. A.**, Sogin, M. L., Marine bacteria exhibit a bipolar distribution. International Symposium on Microbial Ecology 14, Copenhagen, Denmark, Aug 19-24, 2012.
- Schmidt, V., **Amaral-Zettler, L. A.**, Smith, K. F. Changes in the microbiome and potential pathogens along an ornamental pet fish trade route, Ecohealth Conference, Kunming China, Oct 16-18, 2012.
- Amaral-Zettler, L. A.**, Zettler, E. Z., Mincer, T. The Plastisphere and Pathogen Pollution: Microbes on plastic marine debris. Ecohealth Conference, Kunming China, Oct 16-18, 2012.
- Theroux, S., Huang, Y. and **Amaral-Zettler, L.A.** Haptophyte DNA and alkenone signatures during a spring algal bloom event in Lake George, ND, USA, AGU Fall meeting, San Francisco, Dec 3-7, 2012.
- Amaral-Zettler, L. A.**, Theroux, S., Huang, Y. *In situ* and *ex situ* observations of alkenone-producing haptophyte species' distributions in Lake George, ND, USA: Implications for paleothermometry. American Geophysical Union, Fall Meeting 2013, abstract #PP43B-2085
- Schmidt, V., Smith K., Amaral-Zettler, L. A. Salinity acclimation yields a repeatable *Aeromonas* - *Vibrio* dominance shift in the microbiome of a euryhaline fish. World Aquaculture Society Meeting, Seattle, WA. Feb 11, 2014. p.31.
- Amaral-Zettler, L. A.**, Boyd, G., Slikas, B, Zettler, E., Mincer, T. J., Comparative microbial community structure and biogeography of Atlantic and Pacific "Plastisphere" communities. Ocean Sciences Meeting, Honolulu, Hawaii. Feb 23-28, 2014. p. 55



- Zettler, E. R., Morrall, C., Proskurowski, G., Mincer, T. J., **Amaral-Zettler, L. A.**, Microbial succession on Plastic Marine Debris: Development of the Plastisphere Community. Ocean Sciences Meeting, Honolulu, Hawaii. Feb 23-28, 2014. p. 55
- Mincer, T. J., Guzzetta, V. S., Slikas, B., Zettler, E. R., **Amaral-Zettler, L. A.**, Investigation of microbial adherence and virulence factors associated with open-ocean derived plastic marine debris: *Vibrio* bacteria as a model system. Ocean Sciences Meeting, Honolulu, Hawaii. Feb 23-28, 2014. p. 55
- Eren, A. M., Fisher, J.C., Amaral-Zettler, L. A., Sogin, M. L., McLellan, S. L. Dissecting OTUs into more ecologically meaningful units with oligotyping: examples of host specificity and microbial source tracking. Ocean Sciences Meeting, Honolulu, Hawaii. Feb 23-28, 2014. p. 54
- Amaral-Zettler, L. A.**, Yingxin, Y., Ong, B., Siuda, A.N.S., Zettler, E., From experiential education to research: Engaging undergraduate students in ongoing research projects. Ocean Sciences Meeting, Honolulu, Hawaii. Feb 23-28, 2014. p. 71.

g. *Invited lectures*

- June 27, 2003, "Eukaryotic Diversity at pH Extremes", Life in the Extreme: Opportunities in Idaho Workshop, Idaho State University.
- August 25, 2003, "Eukaryotes at pH Extremes", NASA Astrobiology Institute Director's Seminar Series, broadcasted from Woods Hole, MA.
- June 8, 2004, "Microbial Life in Extreme Environments", MBL Writer's Workshop, Woods Hole, MA.
- Sept 17, 2004, "In Search of...Microbial Eukaryotic Diversity", invited talk for the Biology Department at Memorial University, Newfoundland, CANADA.
- Feb 24, 2005, "Rio Tinto, Mars, and the quest for life beyond our planet", Bay Paul Seminar Series, Woods Hole, MA.
- May 29, 2005, "Microbial Diversity: A Three-Domain Approach", Microbial Biodiversity Workshop, The Canadian Institute for Advanced Research, Vancouver, BC CANADA.
- May 31, 2005, "Acidophiles in the Rio Tinto" Committee On The Origin And Evolution Of Life Space Studies Board—Board On Life Sciences, National Research Council, J. Erik Jonsson Center, Woods Hole, MA.
- Dec 2, 2005, "Microbial pathogens in Lake Pontchartrain as a result of Hurricane Katrina Floodwaters: the Known, the Unknown and the Unknowable" invited speaker at the Hurricane Katrina Environmental Impacts Workshop, Northeastern University, Boston, MA.
- March 23, 2006, "Microbial Diversity, Ecology and Evolution" talk for ISIS – Master's program for teachers at University of Southern Connecticut held at the MBL.
- April 13, 2006, "Oceans and Human Health", invited speaker for Microbiology in Biotechnology: past, present and future in celebration of Roger Williams University 50<sup>th</sup> Anniversary.
- June 4, 2006, "Oceans and Human Health", MBL Writer's Workshop, Woods Hole, MA.
- July 20, 2006, "Microbial Diversity: A Three Domain Approach" invited speaker at the First International Late-PCR Workshop, Woods Hole, MA.
- Sept 28, 2006, Heterotrophic Protists Lecture for UNH class led by Elise Sullivan, UNH, Portsmouth, NH.
- Nov 3, 2006, "ICoMM, the International Census of Marine Microbes – Unveiling the Ocean's Hidden Majority" invited speaker at the 7<sup>th</sup> Asia-Pacific Marine Biotechnology Conference, Cochin, India.
- April 9, 2007, "Microbial Diversity, Ecology and Evolution", Biology Department, University of the Azores, Sao Miguel Campus Ponta Delgada, Azores Portugal.
- April 11, 2007, "ICoMM, the International Census of Marine Microbes – Unveiling the Ocean's Hidden Majority" Department of Oceanography and Fisheries, University of the Azores, Horta, Azores, Portugal.
- Nov 26, 2007, "Exploring Microbial Community Populations Structure in Spain's Rio Tinto", Brown University Geology Department, Providence, RI.
- July 11, 2007, "Life in a River of Fire" MBL Coffee Talk, Meigs Room, MBL.
- March 15, 2008, "Oceans and Human Health" Keynote lecturer for Massachusetts Association for Biology Teachers, Framingham State College, Framingham, MA.

- July 14, 2008, "MIRADA, videoconferencing and Web 2.0" November Learning pre-conference workshop in Woods Hole, MA.
- Oct 29, 2008, "Measuring Microbial Ecological Diversity: From Estuaries to Extremes", Graduate School of Oceanography, University of Rhode Island, Narragansett, RI
- Nov 19, 2008, "Human Health and Coastal Ocean Processes", University of Massachusetts, Boston, MA.
- Jan 26, 2009, "The International Census of Marine Microbes" presented in the "Determining the structuring effects of the environment on microbial community composition: approaches and strategies", ICoMM session at the ASLO Aquatic Sciences Meeting, Nice, France.
- Jan 29, 2009, "Habitat Selection at Life's Extremes" invited tutorial talk in the "Strategies for survival vs. habitat selection in extreme biotopes" Session at ASLO Aquatic Sciences Meeting in Nice, France.
- April 1, 2009, "Oceans and Human Health", Community Medicine Group, Brown University guest lecture. (Host: Kate Smith)
- April 6, 2009, "The Status of the Marine Microbial Census", International Census of Marine Microbes 454 User Spring Meeting, Woods Hole, MA.
- April 16, 2009, "Life in Extreme Environments: The Rio Tinto", BIOL1460, Brown University guest lecture. (Host: Jeremy Rich)
- April 29, 2009, "Measuring Microbial Ecological Diversity: From Estuaries to Extremes", Microbiology Department, Cornell University, New York.
- May 21, 2009, "The status of the microbial census: Unveiling the Ocean's Hidden Majority Through Community 454 Tag Pyrosequencing", DNA Barcoding of Marine Biodiversity (MarBOL), Ocean Research Institute, University of Tokyo, Japan.
- Sept 15, 2009, "Microbial Inventory Research Across Diverse Aquatic LTERS ASM LTER Workshop" LTER All Scientists Meeting, Estes Park, Colorado.
- Feb 1, 2010, "The status of the microbial census: Unveiling the Ocean's Hidden Majority Through Community 454 Tag Pyrosequencing", ICoMM Beta Diversity Working Group Meeting, University of Southern California, Los Angeles, CA.
- April 28<sup>th</sup>, 2010, "MIRADA-LTERS- Microbial Inventory Research Across Diverse Aquatic LTERS", J. Craig Venter Institute, Rockville, MD.
- September 13, 2010, "Eukaryotic Life at pH extremes", Extremophiles Meeting, Ponta Delgada, Azores, Portugal.
- February 5<sup>th</sup>, 2012, "The Promise of 'Site-based' Research: The MIRADA-LTERS Project", Shenzhen, China.
- October 15, 2012, "Next Generation DNA Sequencing Techniques and Identifying Potential Pathogens in Environmental Systems", Ecohealth 4<sup>th</sup> International Meeting, Kunming, China.
- April 26, 2013, "Automated Collection of Microbial Samples via the PhytoPlankton Sampler (PPS) (the "poor person's" ESP)", Genomic Observatories Network Workshop, Smithsonian Institution, Washington, D.C.
- January 10, 2014, "A Census of Marine Microbes and Life in a Changing Ocean", **The Microbial Tree of Life and Beyond: The Legacy of Carl Woese (1928-2012)**, A one-day Symposium offered by the International Course **Ecology and Diversity of Marine Microorganisms VIII (ECODIM VIII)** of the Austral Summer Institute XIV (ASI XIV), University of Concepcion, Chile.
- February 11, 2014, "Life in the Plastisphere": Diversity, Function and Fate of Microbes on Plastic Marine Debris. University of Chicago Microbiology Department, Chicago, IL.
- February 13, 2014, "Welcome to the Plastisphere: the New World of Microbes Living on Ocean Plastic", Science Before Supper Lecture Series Co-sponsored by the MBL Associates and the Falmouth Public Library, Falmouth, MA.
- February 24, 2014, "Comparative microbial community structure and biogeography of Atlantic and Pacific "Plastisphere" communities", Ocean Sciences Meeting, Honolulu, Hawaii.
- March 14, 2014, "Welcome to the Plastisphere: The New World of Microbes living on Ocean Plastic", Institute for Science Instruction & Study Program, Marine Biological Laboratory.

*Papers read – N/A*

*h. Work in progress –(\*corresponding author)*

- Xu, Y.<sup>§</sup>, Vick-Majors, T., Morgan-Kiss, R., Priscu, J., **Amaral-Zettler, L.A.**<sup>\*§</sup> Ciliate biodiversity, community structure and novel taxon discovery in McMurdo Dry Valley Lakes, Antarctica. *Biological Bulletin*. (<sup>§</sup>contributed equally). In Revision.
- Theroux, S., Toney, J., Andersen, R., Huang, Y., **Amaral-Zettler, L. A.**\* A "pico" eukaryotic haptophyte is responsible for the production of alkenones with C<sub>37:4</sub>-dominant profile. *Geochimica et Cosmochimica Acta*. In Review.
- Theroux, S., Toney, J., Andersen, R., Nyren, P., Bohn, R., Salacup, J., Huang, Y., **Amaral-Zettler, L. A.**\* Late bloomers: *in situ* and *ex situ* observations of haptophyte species' distributions throughout the course of a seasonal bloom. In Preparation for *Geochimica et Cosmochimica Acta*.
- Schmidt, V., Smith, K., Melvin, W., **Amaral-Zettler, L.A.**\*, Community assembly of a euryhaline fish microbiome during salinity acclimation. In Preparation for *ISME Journal*.
- Amaral-Zettler, L.A.**\*, Schmidt, V., Smith, K.F. Microbial community and potential pathogen shifts along an ornamental fish supply chain. *ISMEJ*. In Preparation for *ISME Journal*.
- Amaral-Zettler, L. A.**\* et al. MIRADA LTERS: Microbial Inventory Research Across Diverse Aquatic Long Term Ecological Research Sites. Target Journal: TBD
- Amaral-Zettler, L. A.**\*, Slikas, B., Tittensore, D., Carlson, L. et al. Global Patterns and Predictors of Marine Bacterial Richness. Target Journal: TBD
- Amaral-Zettler, L. A.**\* et al., Comparison of East-Coast LTER Microbial Communities across a Latitudinal Gradient. Target Journal: *ISME Journal*.
- Booth, M.G., Doherty, M., and **Amaral-Zettler, L.** Microbial community structure of the estuaries of Sapelo Island, GA revealed by massively parallel tag sequencing: Bacteria, Archaea and microbial Eukarya. Target Journal: *ISME Journal*.
- Booth, M. and Amaral-Zettler, L. Dynamics of bacterioplankton diversity and production in the salt marsh-dominated estuarine system of Sapelo Island, Georgia. TBD.
- Miller, T., Amaral-Zettler, L., and McMahon, K., Thermal stratification structures freshwater microbial eukaryotic diversity. Target Journal: *ISME Journal*.

## 6. Research Grants

### a. Current grants:

- NSF: "Collaborative Research: Microbial community assembly in coastal waters of the Western Antarctic Peninsula", PI: **Amaral-Zettler** with Jeremy Rich (Brown University) (9/1/12 - 8/31/15), MBL Award: \$191,029
- NSF: "Collaborative Research: Capturing the elusive 37:4 alkenone-predominating lacustrine haptophyte: alkenone biosynthesis, genetics and culture manipulation"  
PI: **Amaral-Zettler** with Yongsong Huang (Brown University) (NCE), MBL Award Amount: \$108,978
- NSF: "Collaborative Research: Microbial influences on *Alexandrium* populations"  
PI: **Amaral-Zettler** with Donald Anderson (Woods Hole Oceanographic Institution) (NCE), MBL Award Amount: \$255,033
- NSF: "Collaborative Research: Microbial interactions with marine plastic debris: Diversity, function and fate", PI: **Amaral-Zettler** with Tracy Mincer (WHOI) and Erik Zettler (SEA) (03/01/12-02/31/15), MBL Award: \$506,195
- NSF: "DISSERTATION RESEARCH: Is richer always better? Testing the biotic resistance hypothesis in ornamental fish microbiomes", PI: **Amaral-Zettler** with Co-PIs Victor Schmidt and Katherine Smith: (07/01/2014-06/30/2016), MBL Award: \$20,865
- NSF: "Collaborative: RUI: Characterization of Marine and Freshwater Photosynthetic Consortia that Accomplish Cellulose Degradation and Nitrogen Fixation", PI: **Amaral-Zettler** (Substitute for Sheri Simmons) with Co-PI Jean Huang: (03/01/2013 - 02/29/2016), MBL Award: \$204,697

### b. Completed grants:

- Arthur Vining Davis Foundation: "New laboratory and research modules within the Semester in Environmental Science", PI: Ken Foreman: (1/1/2012-12/31/2013), MBL Award: \$150,000
- NSF: "Biodiversity in the global ocean - incorporating molecular biology in field-based approaches to undergraduate studies in marine conservation", PI: Amy Suida (SEA) (**Amaral-Zettler** PI subcontract), MBL Award Amount: \$57,896 (Subcontract from SEA)
- RI NSF EPSCoR: "Understanding coastal environmental change, past, present, and future: A novel

approach combining algal physiology, genetics and lipid biomarkers" Co-PI: **Amaral-Zettler** with Co-PI Tatiana Rynearson (URI) and PI Timothy Herbert (Brown University) (05/01/12-10/31/13), Brown Award: \$199,940

NSF: "Facilitating US-China Collaborations and Student Training in Emerging Molecular Techniques for Identifying Potential Pathogens in Environmental Systems at the 2012 Biennial Conference": Co-PI: **Amaral-Zettler** with PI Katherine Smith (Brown University) (03/15/12-02/14/13), Brown Award: \$61,665

NSF: "Microbial Inventory Research Across Diverse Aquatic MIRADA LTERs," 9/15/07-9/14/11 - NCE, Lead PI, Total Award: \$840,000

Alfred P. Sloan Foundation "International Census of Marine Microbes." 1/01/10-12/31/10, Co-I with PI Mitch Sogin (w/3 Co-Investigators), Total Award: \$450,000

NSF: "Woods Hole Center for Oceans and Human Health," 5/1/04-4/30/10 - NCE, Co-I with Rebecca Gast and PI John Stegeman, Total Award: \$149,732.

NIH/NIEHS: "Woods Hole Center for Oceans and Human Health," 2/16/04-12/31/10 - NCE, Co-I with Rebecca Gast and PI John Stegeman, Total Award: \$459,532

NSF: "Woods Hole Center for Oceans and Human Health," 06/01/09-05/31/11, Co-I with Rebecca Gast and PI John Stegeman, Total Award: \$562,346

Brown Seed Grant: "The dawn of a new era: Deciphering the past climatic and ecological changes using integrated DNA and lipid biomarker fingerprints," 04/01/09-06/30/11 -NCE, Co-I with PI Yongsong Huang, Subcontract amount: \$40,000

Brown Seed Grant: "Tracking disease spread through the wildlife trade: New techniques to identify infectious microbes in aquarium fishes," 04/01/10-06/30/11, Co-PI with Katherine Smith, Total Award: \$90,000

Long Term Ecological Research (LTER) Network: "From Molecules to Metadata: MIRADA LTERs follow-up working group meeting," 1/01/10-12/31/10, Lead PI, Total Award: \$11,935

NSF: "Microbial Inventory Research Across Diverse Aquatic MIRADA LTERs," REU supplement, 8/14/10-9/21/10, Lead PI, Total Award: \$10,468

Alfred P. Sloan Foundation: "Roles of Rare Taxa", 10/1/08-9/30/10 -NCE. Lead PI, Total Award: \$56,000

Alfred P. Sloan Foundation: "International Census of Marine Microbes (ICoMM) - supplement", 01/01/10-12/31/10, Lead PI for subcontract, Total Award: \$20,000

NASA/NAI: "From Early Biospheric Metabolisms to the Evolution of Complex Systems," 11/1/03-0/31/08, Co-I with 11 Co-I's and PI Mitch Sogin, Total Award: \$3,806,368 (direct \$2,766,532, indirect \$1,039,836)

NSF: "SGER: Microbial Pathogens in Lake Pontchartrain as a Result of Hurricane Katrina Floodwaters, 10/01/05-09/30/06, Co-I with PI Gast (WHOI) and Co-I Polz (MIT), Total Award: \$30,043 (direct \$18,895, indirect \$11,148)

Alfred P. Sloan Foundation "International Census of Marine Microbes," 10/01/04-09/30/06, Co-I with PI Mitchell Sogin, Total Award: \$900,000

NSF Molecular and Cell Biology: "A Tropical Microbial Observatory: Collaborative Research on Microbial Diversity in Caterpillars," 1/1/01-9/30/04, Co-I with PI Anna-Louise Reysenbach, Total Award: \$80,081

NSF LExEn: "Adaptation of Unicellular Eukaryotes to Extremely Acidic Environments," \$109,693, 2/1/01-1/31/05, Senior Personnel with PI Mitch Sogin and Co-I P. J. Smith, Total Award: \$474,995

NIH INRSA: "Eukaryotic Life on the Edge: Genetic Diversity and Mechanisms of Internal pH Maintenance in Alkaline and Acidic Environments," Lead PI, 7/1/98-6/30/00, Total Award: \$62,876

NIH: "Molecular Phylogeny of Eukaryotes," 9/1/89-6/30/01, Postdoctoral Fellow with PI Mitchell Sogin, Total Award: \$895,211

c. *Proposals submitted*

NOAA: "MBON TIEMPPo: Temporal Investigations of Eastern Marine Pelagic Populations". 8/1/14-7/31/19. Lead PI Heidi Sosik (WHOI); MBL subcontract PI: Amaral-Zettler. MBL Award: \$836,154

NSF: "CyberSEES: Type 2: Collaborative Research: Data integration for marine biodiversity and indicators of sustainable ecosystems" 10/1/14-9/30/17, PI: Amaral-Zettler with Heidi Sosik (WHOI) and Peter Fox (RPI). MBL Award: \$149,382.

7. **Service**

i. *To the University -*

Buildings and Grounds Committee, 2004-2013  
MBL Diversity Committee 2014  
Brown-MBL Joint Graduate Program Committee 2008

ii. *To the profession*

MBL Corporation Member 2007-present  
MIT-WHOI Alumni Committee 2000-2008  
NASA Exobiology Review Panel member (2003)  
Reviewer for NASA Institute for Advanced Concepts (2005)  
Society of Protozoology Organizing Committee (2004)  
NOAA Ocean Exploration Review Panel Member (2006)  
Reviewer for NSF programs in Environmental Biology, Biological Oceanography, CAREER, Population and Community Ecology  
Reviewer for the European Science Foundation (2006)  
Reviewer for Sloan Foundation  
Reviewer for National Geographic Society  
Secretariat (Program Manager) and Education and Outreach Lead for the International Census of Marine Microbes (ICoMM) project that was part of the Census of Marine Life program funded by the Sloan Foundation (2004-2010)  
Life in a Changing Ocean Theme Leader, (2011) Observing and Predicting Change  
Micro B3 Scientific Advisory Board Member (2011-present)

Editorial Boards

Reviewer for: Journal of Eukaryotic Microbiology, Protist, European Journal of Protistology, Biological Bulletin, Marine Micropaleontology, Molecular Phylogeny and Evolution, Aquatic Microbial Ecology, Microbial Ecology, New Phycology, International Society for Microbial Ecology, Journal, TREE, Frontiers in Microbiology, Molecular Ecology

iii. *To the community –*

JSOST Biodiversity Observing Network Steering Committee Member and Co-Chair (2010)  
Genomics Standards Consortium Board Member and RCN Board Member (2008 – present)  
GEO-BON Marine Ecosystems Working Group Participant (2012-present)  
ASTM International: Committee D20 on Plastics and Subcommittee D20.96 on Environmentally Degradable Plastics and Biobased Products

**8. Honors and Awards (chronological order)**

1989	Woods Hole Oceanographic Institution Summer Fellowship
1986-1990	Sc.B. with Honors in Aquatic Biology, Brown University, Providence, RI Brown University National Scholarship Arnold Bennett, Class of 1872 Award for excellence in Biology
1991-1996	National Science Foundation Graduate Research Fellowship Scurlock Funds for research at the Bermuda Biological Station Grant-In-Aid Award for research at the Bermuda Biological Station American Museum of Natural History Lerner-Gray Fund for Marine Research Woods Hole Coastal Research Center Grant Award
1998-2000	NIH National Research Service Award
2008	Census of Marine Life Outstanding Achievement Award for Data, Knowledge and Visualization (ICoMM)
2014	Environmental Science and Technology First Runner Up for Best Environmental Science Papers of 2013 awarded to "Life in the "Plastisphere": Microbial communities on plastic marine debris."

**9. Teaching**

GEOL1950F; Geomicrobiology (Co-Instructor with Jeremy Rich and Joe Vallino), Brown University, Providence RI, (Fall, 2011) 10 students, (Fall, 2013) 9 students.

Marine Biodiversity and Conservation, NSF-TUES curriculum development (faculty member), Sea Education Association, Woods Hole, MA (Spring 2012) 17 students, (Spring 2013) 18 students, (Spring 2014) 14 students.

Partnerships in Education Program (PEP), Woods Hole Diversity Initiative, (Geological Oceanography, 2011); (Biological Oceanography, 2012, 2013)

Graduate Students:

Susanna Theroux Ph.D., 2012 Geology, Brown-MBL Joint Program  
Victor Schmidt pre-doctoral candidate, 2011 IGERT Fellow, EEB, Brown-MBL Joint Program  
Yuan Xu visiting pre-doctoral student from Ocean University of China, Qingdao, China

Master's Students:

Gail Rosen 2010, EEB Brown University Master's Program

Postdoctoral Scientists:

Woo Jun Sul, Ph.D., Michigan State University, 2009, Assistant Professor  
Elizabeth McCliment, Ph.D. University of Delaware 2007, Postdoctoral Fellow  
Carmen Palacios, Ph.D. University of Valencia 1997, Associate Professor  
Angeles Aguilera, Ph.D. Universidad Complutense Madrid 1996, Research Scientist  
Felipe Gomez, Ph.D. Universidad Autonoma de Madrid, 1997, Tenure Track Researcher