SUSANNE NEUER, Ph.D.
Professor

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Education and Degrees

Post-Doctorate, University of Bremen, Marine Biogeochemistry, 10/1993-12/1995

PhD, Oregon State University, Biological Oceanography, 11/1992

MSc, University of Washington, Biological Oceanography, 12/1988

Diplom (equivalent to BS) in Biology, University of Kiel, 08/1986

Professional employment

07/ 2015 –present, Professor

2009-2015, Associate Professor (tenured), School of Life Sciences, Arizona State University

2004-2009, Associate Professor (untenured), School of Life Sciences, Arizona State University

05-07/2003, 06-07/2004, Visiting Professor, Ocean Margin's Institute, Bremen, Germany

01/2001-05/2004, Visiting Assistant Professor, Dept. of Geological Sciences, ASU

04/2000-05/2004, Assistant Research Professor, Dept. of Biology, ASU

01/1996-03/2000, Research Associate, Dept. of Geosciences, Univ. of Bremen, Germany

Parental leave time: 12 months

Select Leadership/ Professional service positions

- Vice Co-Chair (2018) and Co-Chair (2022), Gordon Research Conference on Ocean Biogeochemistry
- Elected member, ASU University Senate, 08/2020-present
- Associate Editor**,** Deep-Sea Research I, 08/2015-present
- Associate Director (Graduate Programs), School of Life Sciences, Arizona State University, 07/2015-12/2018
- Assistant Director (Graduate Programs), School of Life Sciences, Arizona State University 07/2013-06/2015
- Site reviewer, Geomar, Helmholtz Center for Ocean Research, Kiel, Germany, October 2017
- Vice-chair, ASLO, Ocean Sciences Meeting 2016
- Member, Ocean Carbon and Biogeochemistry (OCB) Scientific Steering Committee, 2014-

2016
- Chair, Ocean Time-series Committee, a subcommittee of the OCB, 2014-2016
- Past-President, ASU Faculty Women's Association, AY 2015/2016
- President, ASU Faculty Women's Association, AY 2014/2015
- President-elect, ASU Faculty Women's Association, AY 2013/2014
- Founding Director, Graduate Program "Environmental Life Sciences", Dec. 2008-August 2013
- Board of Directors (elected), Association for Women in Science, Washington, DC. Jan. 2009-Dec. 2012
- President, Central Arizona Chapter, Association for Women in Science (AWIS), 5/2008-06/2010

Awards

- Fellow, Hanse Institute for Advanced Studies, Delmenhorst, Germany; May-July 2013; March-June 2011 (Sabbatical); May-July, 2000-2002
- Nominated, ASU College of Liberal Arts Teaching Award, 2012
- Nominated, ASU Founder's Day Faculty Research Award, 2010
- Outstanding Achievement Award, ASU Commission on the Status of Women, 2009
- Named Senior Sustainability Scientist, Global Institute of Sustainability, ASU, 2010
- Named Honors Disciplinary Faculty, Barrett's Honors college, 2011-present
- Fulbright-ITT Scholar, 1986-1988

Membership in Professional Organizations

- Association for the Sciences of Limnology and Oceanography (ASLO)
- American Geophysical Union (AGU)
- The Oceanography Society (TOS)
- American Association for the Advancement of the Science (AAAS)

Funding

Current

ZOOPLANKTON MEDIATION OF PARTICLE FORMATION IN THE SARGASSO SEA. 9/1/2020 -8/31/2023, ASU portion $619,098, NSF, Lead-PI (with Leocadio Blanco-Bercial, Bermuda Institute of Ocean Sciences)

A CONTINUOUS REMOTE SENSING MONITORING TOOL TO IDENTIFY ALGAL BLOOMS. 8/1/2020 - 7/31/2021, $78,451, Salt River Project, Co-I (Lead Peter Fox, ASU).

ANALYSIS OF HARMFUL ALGAL BLOOMS AND GOLDEN ALGAE DYNAMICS USING DRONES AND SATELLITES (CONTD). 8/1/2019 - 7/31/2020, $83,751, Salt River Project, Co-I (Lead Peter Fox, ASU).

EXOPLANETARY ECOSYSTEMS: EXPLORING LIFE'S DETECTABILITY ON CHEMICALLY DIVERSE EXOPLANETS. 10/1/14-9/30/20, $7,994,891, NASA, Co-I (Lead: Steven Desch, SESE, 16 total Co-Is).

AGGREGATION OF MARINE PICOPLANKTON. 3/1/2017 - 2/28/2021, $689,870 NSF, PI (with Hinsby Cadillo –Quiroz, Co-I).

Funding

Past

A SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT FOR MICROPLASTICS AND ORGANIC CONTAMINANTS IN FISH IN PANAMA. 1/1/-12/31/2019, $41,208.30, STRI-ASU Collaborative Initiative Grant made to my PhD student Kassandra Dudek for research at the Smithsonian Tropical Research Institute, Bocas del Toro, Panama in summer/fall 2019.

ANALYSIS OF HARMFUL ALGAL BLOOMS AND GOLDEN ALGAE DYNAMICS USING DRONES AND SATELLITES. 8/1/2018 - 7/31/2019, $91,886, Salt River Project, Co-I (Lead Peter Fox, ASU).

REMOTE SENSING TO DETERMINE ALGAL RELATED WATER QUALITY IMPACTS IN THE SALTVERDE RIVER WATERSHED. 8/1/2017 - 7/31/2018, $53,295, Salt River Project, Co-I (Lead Peter Fox, ASU).

THE ROLE OF MICROBIAL COMMUNITIES IN THE DEGRADATION AND REMOVAL OF MICRO PLASTICS FROM THE SURFACE OCEAN. JAN 15-JUNE 30, 2018, $ 24,823, 2018 SOLS-KED RESEARCH INVESTMENT INITIATIVE (NEUER, PI).

COLLABORATIVE RESEARCH: PLANKTON COMMUNITY COMPOSITION AND TROPHIC INTERACTIONS AS MODIFIERS OF CARBON EXPORT IN THE SARGASSO SEA; 10/1/2010 – 9/30/14. NSF Biological Oceanography, ASU PI, with Dr. Tammi Richardson (lead PI, Univ. of South Carolina), Dr. Mike Lomas (Bermuda Institute of Ocean Sciences, now: Bigelow Institute for Ocean Sciences) and Dr. Rob Condon (Dauphin Island Sea Lab). Total funding amount: $1.2 Mio, ASU portion: $396,013.

COLLABORATIVE RESEARCH: SINKING RATES AND NUTRITIONAL QUALITY OF ORGANIC MATTER EXPORTED FROM SEA ICE; THE IMPORTANCE OF EXOPOLYMERIC SUBSTANCES; 1/1/2011-12/31/2013, NSF Polar Programs, ASU PI, with Dr. Andrew Juhl (Lead, Lamont Doherty Earth Observatory, Columbia University). Total funding amount: $1.04 M. ASU portion: $308,084.

FOLLOW THE ELEMENTS. NASA-ASTROBIOLOGY. $7,517,436, 1/1/2009-12/31/2014, Co-I with lead PI Dr. Ariel Anbar, SESE, ASU (total of 14 Co-Is and 30 collaborators)

COMPOSITION OF THE PLANKTON COMMUNITY AND ITS CONTRIBUTION TO PARTICLE FLUX IN THE SARGASSO SEA; 5/1/2008 – 4/30/12, $645,869, NSF Biological Oceanography, sole PI.

FEASIBILITY STUDY FOR EARLY WARNING SYSTEMS FOR ALGAE-INDUCED TASTES AND ODORS; 7/1/09-12/31/09, $22,906, AMERICAN WATER WORKS ASSOCIATION, SOLE PI.

REMOTE SENSING OF CENTRAL ARIZONA RESERVOIRS AND POTENTIAL FOR EARLY DETECTION OF ALGAL BLOOMS, 07/01/08-06/30/09, $49,862, SALT RIVER PROJECT, sole PI.

REMOTE SENSING OF SALT RIVER RESERVOIRS AND POTENTIAL FOR AN EARLY DETECTION SYSTEM OF ALGAL BLOOMS, 01/01/07-12/31/08, $32,500, ASU WATER QUALITY CENTER, NSF, sole PI.

PRELIMINARY STUDY ON THE IMPACT OF DESCENT ENGINE EXHAUST ON BIOSIGNATURES AND PROPERTIES OF SURFACE ICE ON AN ICY BODY; Strategic University Research Partnership (SURP) Director's Research and Development Fund Proposal FY 2006, ASU-JPL, 09/6/06-09/30/08, $68,958, LEAD-PI. Co-I Tibor Balint, JPL.

ANALYSIS OF NUTRIENT BUDGETS AND CARBON EXPORT IN THE EASTERN AND WESTERN SUBTROPICAL NORTH ATLANTIC OCEAN; 06/01/2004-5/31/2008, $555,264, NASA, sole ASU PI and Lead-PI; Co-PI Drs Ray Najjar, Penn State, and Dennis McGillicuddy (unfunded), Woods Hole Oceanographic Institution.

MICROSCALE CARBON AND NITROGEN CYCLING IN BIOLOGICAL DESERT CRUSTS; 07/15/2003-07/14/2006, **$**296,959, USDA (CO-PI WITH PI F. GARCIA-PICHEL).

PADT BIOSAMPLER TESTING; 11/01/05-6/1/2006, $26,581, sole PI, collaboration with Phoenix Analysis and Design Technologies (PAD).

Publications

A. Refereed

[a]indicates grad. student
[b]indicates Post-Doc
[c] indicates undergrad. student
letter underlined: not at ASU

**corresponding author*

(if not first author)

Google Scholar Citation Indexes:

http://scholar.google.com/citations?view_op=list_works&hl=en&user=qrbtbGcAAAAJ

(Accessed Sept. 2020)

All: Citations 2409, **H-Index 29, i10-index 41**

Publications submitted or in review:

56. B. N. Cruz[a] , S. Brozak[c], and **S. Neuer***. Microscopy and DNA-based characterization of sinking particles at the Bermuda Atlantic Time-series Study (BATS) station point to zooplankton mediation of particle flux**.** *Submitted to Limnology and Oceanography.*

Peer-reviewed publications published or *in press*:

55. G. Fischer, **S. Neuer**, S. Ramondenc, T.J. Müller, B. Donner, G. Ruhland, V. Ratmeyer, G. Meinecke, N. Nowald, M. Klann and G. Wefer. 2020. Increase in spring-time particle flux in the Canary Basin between 1991 and 2009 and comparison to sediment trap records off Mauritania. Frontiers in Earth Science, https://doi.org/10.3389/feart.2020.00280.

54. V. Ç. Yumruktepe[a], B. Salihoğlu, **S. Neuer**. 2020. Controls on productivity and carbon export in the subtropical North Atlantic. Progress in Oceanography, 187, https://doi.org/10.1016/j.pocean.2020.102380.

53. D. M. Glaser, H. E. Hartnett, S. J. Desch, C. Unterborn, A. Anbar, S. Buessecker, T. Fisher, S. Glaser, S. R. Kane, C. M. Lisse, C. Millsaps, **S. Neuer,** J. G. O'Rourke, N. Santos, S. Imari Walker, M. Zolotov. 2020. Detectability of Life on Pelagic Planets and Water Worlds. The Astrophysical Journal, https://arxiv.org/abs/2004.03631.

52. K. L. Dudek[a], B. N. Cruz[a], B. Polidoro and **S. Neuer*.** 2020. Microbial colonization of microplastics in the Caribbean Sea. Limnology and Oceanography Letters, doi: 10.1002/lol2.10141

51. B. N. Cruz[a] and **S. Neuer***. 2019. Heterotrophic bacteria enhance the aggregation of the marine picocyanobacteria *Prochlorococcus* and *Synechococcus***.** Frontiers in Microbiology, doi: 10.3389/fmicb.2019.01864.

50. F. De Martini[a], **S. Neuer***, D. Hamill[c], J. Robidart and M. W. Lomas. 2018. Clade and strain specific contributions of *Synechococcus* and *Prochlorococcus* to carbon export in the Sargasso Sea. Limnology and Oceanography. DOI: 10.1002/lno.10765

49. D. Roush[a], E. Couradeau, B. Guida, **S. Neuer** and F. Garcia-Pichel. 2018. A new niche for anoxygenic phototrophs as endoliths. Applied and Environmental Microbiology. 10.1128/AEM.02055-17.

48. **S. Neuer,** Heather M. Benway, Nicholas Bates, Craig A. Carlson, Matthew Church, Michael DeGrandpre, John Dunne, Ricardo Letelier, Michael Lomas, Laura Lorenzoni, Frank Muller-Karger, Mary Jane Perry, and Paul Quay. 2017. EOS Monitoring ocean change in the 21st century, *Eos, 98,* https://doi.org/10.1029/2017EO080045. Published on 08 September 2017.

47. W. Deng [a], B. Cruz [c] and **S. Neuer***. 2016. Effects of nutrient limitation on cell growth, TEP production and aggregate formation of marine *Synechococcus.* Aquatic Microbial Ecology. 78: 39–49, 2016.

46. W. Deng[a], L. Monks[c], **S. Neuer*.** 2015. Effects of clay minerals on the aggregation and settling of marine *Synechococcus,* Limnology and Oceanography, 60, 805-816.

45. **S. Neuer**, M. Iverson and G. Fischer. 2014. The Biological Carbon Pump as part of the global carbon cycle. Limnol. Oceanogr. e-Lectures, doi:10.4319/lol.2014.sneuer.miversen.gfischer.

44. A. Cianca, R. Santana, S. E. Hartman, J.M. Martin, M. González-Dávila, M. J. Rueda, O. Llinás and **S. Neuer**. 2013. Oxygen Dynamics in the North Atlantic subtropical gyre. Deep-Sea Research II, 93, 135-147.

43. J. Amacher[a], **S. Neuer*** and M. Lomas. 2013. DNA-based molecular fingerprinting of eukaryotic protists and cyanobacteria contributing to sinking particle flux at the Bermuda Atlantic Time-series Study. Deep-Sea Research II, 93, 71–83.

42. B. Salihoglu, **S. Neuer,** S. Painting, R. Murtugudde, E.E. Hofmann, J.H. Steele, R.R. Hood, L. Legendre, M.W. Lomas, J.D. Wiggert, S. Ito, Z. Lachkar, G. Hunt, K.F. Drinkwater, C.L. Sabine. 2013. Bridging marine ecosystem and biogeochemistry research: Lessons and recommendations from comparative studies. Journal of Marine Systems, 109-110, 161-175.

41. A. Cianca[b], J. M. Godoy, J. P. Marrero, M. J. Rueda, O. Llinás and **S. Neuer**. 2012. Interannual variability of chlorophyll and the influence of low frequency climate modes in the North Atlantic subtropical gyre. Global Biogeochemical Cycles, Vol. 26, doi: GB2002/10.1029/2010GB004022.

40. B. Fernández-Castro, L. Anderson, E. Marañon, **S. Neuer**, B. Ausín, M. González-Dávila, J. M. Santana-Casiano, A. Cianca, R. Santana, O. Llinás, M. J. Rueda, and B. Mouriño-Carballido. 2012. Regional differences in modelled net production and shallow remineralization in the North Atlantic subtropical Gyre. Biogeosciences, 9, 1–16, www.biogeosciences.net/9/1/2012/doi:10.5194/bg-9-1-2012.

39. J. Amacher[a] , C. Baysinger[c] and **S. Neuer***. 2011. Biases associated with DNA based molecular studies of marine protist diversity. Journal of Plankton Research 33, 1762-1766.

38. P. Tarrant, J. Amacher [a] and **S. Neuer***. 2010. Assessing the potential of MERIS and MODIS data for monitoring total suspended matter in small and intermediate sized lakes and reservoirs. Water Resources Research. Vol. 46, W09532, doi:10.1029/2009WR008709.

37. B. Eddie[a], A. Juhl, C. Krembs and **S. Neuer***. 2010. Effect of Environmental Variables on

Eukaryotic Microbial Community Structure of Land-fast Arctic Sea Ice. Environmental Microbiology 12, 797–809**.**

36. P. Helmke[b], **S. Neuer***, M. Conte, M.Lomas and T. Freudenthal. 2010. Cross-basin variability of organic carbon export and flux attenuation in the subtropical North Atlantic Gyre. Deep-Sea Research I 57, 213-227.

35. G. Fischer, **S. Neuer**, R. Davenport, P. Helmke, R. Schlitzer, O. Romero, V. Ratmeyer, B. Donner, T. Freudenthal, H. Meggers, and G. Wefer. 2010. The northwest African margin. Liu, K.-K., Atkinson, L., Quiñones, R., Talaue-McManus, L. (Editors), 2010. Carbon and Nutrient Fluxes in Continental Margins: A Global Synthesis. IGBP Book Series. Springer, Berlin, pp. 78-103.

34. J. Amacher[a], **S. Neuer*** Anderson, I.[c] and R. Massana, R. 2009. Molecular approach to determine contributions of the protist community to particle flux. Deep-Sea Research I, 56, 2206-2215.

33. P. Tarrant and **S. Neuer*.** 2009. Monitoring algal blooms in a southwestern U.S. reservoir system. EOS Transactions, American Geophysical Union, 90, 5, 38-39.

32. B. Mouriño and **S. Neuer**. 2008. Regional differences in the role of eddy pumping in the North Atlantic subtropical gyre: Historical conundrums revisited. Oceanography, 21, 52-60.

31. B. Eddie[c], Krembs, C. and **S. Neuer***. 2008. Characterization and growth response to temperature and salinity of psychrophilic, halotolerant *Chalmydomonas sp* ARC isolated from Chukchi sea ice. Marine Ecology Progress Series, 354, 107-117.

30. A. Cianca[b], P. Helmke[b], B. Mouriño, M-J Rueda, O. Llinás and **S. Neuer***. 2007. Decadal analysis of hydrography and in situ nutrient budgets in the western and eastern North Atlantic subtropical gyre. Journal of Geophysical Research – Oceans 112. C07025, doi:10.1029/2006JC003788.

29. **S. Neuer,** A. Cianca[b], P. Helmke[b], T. Freudenthal[a], R. Davenport[a], M. Knoll, M. Santana-Casiano, M. González-Davila, M. Rueda and O. Llinás. 2007. Biogeochemistry and hydrography in the Eastern Subtropical North Atlantic gyre. Results from European Time-Series Station ESTOC. Progress in Oceanography 72, 1-29.

28. G. Fischer, G. Karakas, M. Blaas, V. Ratmeyer , N. Nowald, R. Schlitzer, P. Helmke, R. Davenport , B. Donner , **S. Neuer** and G. Wefer. 2007. Mineral ballast and particle settling rates in the coastal upwelling system off NW Africa and the South Atlantic. International Journal for Earth Sciences. DOI 10.1007/s00531-007-0234-7.

27. S. L. Johnson, **S. Neuer** and F. Garcia-Pichel. 2006. Export of nitrogenous compounds due to incomplete cycling within biological soil crusts of arid lands. Environmental Microbiology. Vol. 9: 680-689. doi: 10.1111/j.1462-2920.2006.01187

26. **S. Neuer**, M.E. Torres-Padrón, M.D. Gelado-Caballero, J. Hernandez-Brito, M.J. Rueda and Gerold Wefer. 2004. Dust deposition pulses to the eastern subtropical North Atlantic gyre: Does ocean's biogeochemistry respond? Global Biogeochemical Cycles, 18, GB4020, doi: 10.1029/2004GB002228.

25. P. H. Figureido, R. Greeley, **S. Neuer**, L. Irwin, D. Schulze-Makuch. 2003. Locating

potential biosignatures on Europa from surface geology observations Astrobiology, 3, 851-861.

24. D.M. Karl, N. Bates, P.J. Harrison, C. Jeandel, O. Llinas, K.K. Liu, J.-C. Marty, A.F. Michaels, J. C. Miquel, **S. Neuer,** Y. Nojiri and C. S. Wong. 2003. Temporal studies of biogeochemical processes determined from ocean time-series observations during the JGOFS era. pp. 239-267. *In*: Ocean Biogeochemistry: the role of the ocean carbon cycle in global change. M. J. R. Fasham (Ed.). International Geosphere-Biosphere Programme Book Series Nr. Springer-Verlag, Berlin, Heidelberg.

23. F. Garcia-Pichel, J. Belnap, **S. Neuer** and F. Schanz. 2003. Estimates of global cyanobacterial biomass and its distribution. Algological Studies 109: 213-228.

22. **S. Neuer,** R. Davenport[a], T. Freudenthal[a], G. Wefer , O. Llinás, M-J. Rueda, D. Rueda, Steinberg, D. Karl. 2002. Differences in the biological carbon pump at three subtropical ocean sites. Geophysical Research Letters, 29, 1885, doi:10.1029/2002GL015393.

21. **S. Neuer**, T. Freudenthal[a], R. Davenport[a], O. Llinás, M-J. Rueda. 2002. Seasonality of surface water properties and particle flux along a productivity gradient off NW Africa. Deep-Sea Research II, 49, 3561-3576.

20. J. Pätsch, W. Kühn, G. Radach, J.M. Santana Casiano, M. Gonzalez Davila**, S. Neuer**, T. Freudenthal, and O. Llinás . 2002. Interannual variability of carbon fluxes at the North Atlantic station ESTOC. Deep-Sea Research I. 49, 253-288.

19. G. Parilla, **S. Neuer**, P.-Y. LeTraon, E. Fernandez. 2002. Topical studies in oceanography: Canary Islands Azores Gibraltar Observations (CANIGO); Volume 1: Studies in the northern Canary Islands basin. Deep-Sea Research II, 49, 3409-3413.

18. G. Parilla, **S. Neuer**, P.-Y. LeTraon, E. Fernandez. 2002. Topical Studies in Oceanography: Canary Islands Azores Gibraltar Observations (CANIGO). Vol. 2: Studies of the Azores and Gibraltar regions**,** Deep-Sea Research II, 49, 3951-3955.

17. R. Davenport[a], **S. Neuer**, P. Helmke, J. Perez-Marrero, O. Llinás, and G. Wefer. 2002. Primary production in the northern Canary Islands region as inferred from SeaWiFS imagery. Deep-Sea Research II, 49, 3481-3496.

16. F. Abrantes, H. Meggers, S. Nave, J. Bollman, S. Palma, C. Sprengel, J. Henderiks, A. Spies, E. Salgueiro, T. Moita, and **S. Neuer**. 2002. Fluxes of microorganisms along a productivity gradient in the Canary Islands region (29°N): Implications for paleoreconstructions. Deep-Sea Research II, 49, 3599-3629.

15. C. Sprengel, K.-H. Baumann, J. Henderiks, R. Henrichs and **S. Neuer.** 2002. Modern coccolithophore and carbonate sedimentation along a productivity gradient in the Canary Islands region: Seasonal export production and surface accumulation rates. Deep-Sea Research II, 49, 3577-3598.

14. T. Freudenthal[a], **S. Neuer**, H. Meggers[b], R. Davenport[a], G. Wefer. 2001. Influence of lateral particle advection and organic matter degradation on sediment accumulation and stable nitrogen isotope ratios along a productivity gradient in the Canary Islands region. Marine Geology, 177, 93-109.

13. A.N. Antia, W. Koeve, G. Fischer, T. Blanz, D. Schulz-Bull, J. Scholten**, S. Neuer**, K.

Kremling, J. Kuss, R. Peinert, D. Hebbeln, U. Bathmann, U. Fehner, and B. Zeitzschel. 2001. Basin-wide particulate carbon flux in the Atlantic Ocean: Regional export patterns and potential for atmospheric CO_2 sequestration, Global Biogeochemical Cycles, 15, 845-862.

12. C. Sprengel, K.-H. Baumann and **S. Neuer**. 2000. Seasonal and interannual variation of coccolithophore fluxes and species composition in sediment traps north of Gran Canaria (29°N, 15.5°W). Marine Micropaleontology. 39, 157-178.

11. R. Davenport[a] and **S. Neuer**. 1999. Satellite remote sensing of phytoplankton biomass and primary production in the world's ocean. (in German). *In:* Rundgespräche der Kommission für Ökologie, Bd. 17: Fernerkundung und Ökosystem-Analyse. S. 129-142.

10. R. Davenport[a], **S. Neuer**, A. Hernández-Guerra, M.-J. Rueda, O. Llinás, G. Fischer and G. Wefer. 1999. Seasonal and interannual pigment concentration in the Canary Islands region from CZCS data and comparison with observations from the ESTOC time-series station. Journal of Remote Sensing. 20, 1419-1433.

9. **S. Neuer**, G. Fischer, V. Ratmeyer and G. Wefer. 1997. Deep-water particle flux in the Canary Island region: seasonal variation in relation to long-term satellite derived pigment data and lateral sources. Deep-Sea Research I. 44, 1451-1466.

8. G. Fischer, **S. Neuer**, G. Wefer and G. Krause. 1996. Short-term sedimentation pulses recorded with a chlorophyll sensor and sediment traps in 900 m water depth in the Canary Basin. Limnology and Oceanography, 41, 1354 - 1359.

7. **S. Neuer** and T.J. Cowles. 1995. Comparative size-specific grazing rates in field populations of ciliates and dinoflagellates. Marine Ecology Progress Series 125: 259-267.

6. **S. Neuer** and T.J. Cowles. 1994. Protist herbivory in the Oregon upwelling system. Marine Ecology Progress Series 113: 147-162.

5. **S. Neuer** and P.J.F.S. Franks. 1993. Determination of ammonium uptake and regeneration rates using the seawater dilution method. Marine Biology 116: 497-505.

4. T. J. Cowles, R. A. Desiderio and **S. Neuer.** 1993. *In situ* characterization of phytoplankton from vertical profiles of fluorescence emission spectra. Marine Biology 115, 217-222.

3. R. R. Hood, **S. Neuer** and T. J. Cowles. 1992. Autotrophic production, biomass and species composition at two stations across an upwelling front. Marine Ecology Progress Series 83: 221-232.

2. **S. Neuer.** 1992. Growth dynamics of marine *Synechococccus* spp. in the Gulf of Alaska. Marine Ecology Progress Series 83: 251-262.

1. **S. Neuer.** 1980. MSS-Betäubungsmittel für wasserlebende Tiere. (MSS-Sedative for aquatic animals.) Mikrokosmos 69 (8): 270. German applied microscopy journal (Elsevier).

B. Non-peer reviewed; (newsletter, data submissions, articles, reports)

S. Neuer and 12 others (OCB Ocean Time-series Committee and time-series scientists). The Importance of Monitoring Earth's Largest Ecosystem. *e-Letter* to Hunter-Cevera *et al.* (2016) Physiological and ecological drivers of early spring blooms of a coastal phytoplankter. http://science.sciencemag.org/content/354/6310/326.e-letters 28 Oct. 2016.

A. Juhl and **S. Neuer**. 2016. Physical/chemical and biological measurements of properties of sea ice and under-ice water collected near Barrow, AK in spring 2011 and 2012. *NSF Arctic Data Center.* doi:10.18739/A2GM0Q. https://arcticdata.io/catalog/#view/doi:10.18739/A2GM0Q (Publication of data file from NSF Project: Collaborative research: Sinking rates and nutritional quality of organic matter exported from sea ice; the importance of exopolymeric substances).

S. Neuer, M. H. Iversen and G. Fischer FEATURED *L&O* E-LECTURE. 2016. The Ocean's Biological Carbon Pump as Part of the Global Carbon Cycle. Invited contribution. Limnology and Oceanography Bulletin. Vol: 25, 22–23, DOI: 10.1002/lob.10083

S. Neuer. 2014. "Questions for Susanne Neuer". An invited contribution to the FixO3 Project Newsletter. Volume 1, Issue 1. p. 10.

S. Neuer and B. Salihoglu. 2014. Integrating marine biogeochemistry and ecosystem research: From nutrients to fish. OCB (Ocean Carbon Biogeochemistry) News, 7, 7-10, Summer 2014. http://www.us ocb.org/publications/OCB_NEWS_SUMMER14.pdf.

S. Neuer. 2014. An Ocean In Space. Invited feature story. AWIS (Association for Women in Science) magazine, Spring 2014, p. 29-32 (Issue dedicated to "Career transitions"). https://c.ymcdn.com/sites/awis.site-ym.com/resource/resmgr/Magazine_Article/An_Ocean_in_Space.pdf.

P. Tarrant, T. Sawyer, R. Mestek and **S. Neuer*.** 2009. Feasibility Study for Early Warning Systems for Algae-induced Tastes and Odors. Final Report. AWWA (American Water Works Association) Technical and Education Council. 24 pp.

S. Neuer, and cruise participants: Report and preliminary results of FS "Meteor" Cruise M45/5, Bremen - Las Palmas, 1.10.- 3.11.1999. Berichte, Fachbereich Geowissenschaften, Universität Bremen, No. 160, Bremen, 2000.

S. Neuer,. and cruise participants: Report and preliminary results of FS "Poseidon" Cruise 248, Las Palmas - Las Palmas, 15.2.- 26.2.1999. Berichte, Fachbereich Geowissenschaften, Universität Bremen, No. 143, Bremen, 1999.

S. Neuer, and cruise participants: Report and preliminary results of FS "Poseidon" Cruise 237/2, Vigo - Las Palmas, 18.3.- 31.3.1998. Berichte, Fachbereich Geowissenschaften, Universität Bremen, No. 121, Bremen, 1998.

S. Neuer, and cruise participants: Report and preliminary results of FS "Victor Hensen" Cruise 96/1, Bremerhaven - Bremerhaven, 10.1.- 4.3.1996. Berichte, Fachbereich Geowissenschaften, Universität Bremen, No. 96, Bremen, 1997.

S. Neuer and M. Rueda (1997): European Time-Series Station In Operation North of

Canary Islands. *U.S. JGOFS Newsletter*, March 1997.

Presentations (Invited)

Invited seminar speaker, Institute for Baltic Research, Warnemuende, Germany, Jan. 16, 2020, "Importance of pico-phytoplankton in the Biological Carbon Pump: A conundrum revisited"

Invited speaker, Plataforma Canarias, Canary Islands, Spain, Nov. 21, 2019, "ESTOC: A Key Station for Biogeochemical Discoveries Across the Subtropical Atlantic"

Invited Lecturer, Marine Biogeochemistry Training School, Faro, Portugal, 5 – 8 June, 2018
Invited Lecturer, Marine Biogeochemistry Training School, Faro, Portugal, 1 – 6 June, 2020 +1-6 June, 2020 (*postponed*)

Invited Lecturer, Ramon Margalef Summer Colloquia 2020**, "**A cross-system view of biogeochemical cycles: drivers and players". Institut de Ciències del Mar, Barcelona, Spain, 5- 10 July, 2020 (*postponed*)

Invited speaker, Seminar, "Exploring the Role of Protists and Cyanobacteria in the Biological Carbon Pump." UC Santa Cruz Ocean Sciences Winter Seminar Series. Feb. 2, 2018

Invited speaker, Seminar, Institute for Marine Science, Erdemli-Mersin, Middle East Technical University, Turkey, Dec. 14, 2016. "Biology in the Biological Carbon Pump"

Invited Lecturer, Marie Tharp Lecture Series for Ocean Research, Geomar, Kiel, Germany Oct. 28, 2016. "Biology in the Biological Carbon Pump"

Invited Speaker, Gordon Research Conference on Ocean Biogeochemistry, The Chinese University of Hong Kong, Hong Kong, China, June 12-17, 2016. "A Hitchhiker's Guide to the Abyss: Organism's Role in the Biological Carbon Pump"

Invited Lecturer, Ramon Margalef Summer Colloqium, Barcelona, Spain**,** July 6-10, 2015**. "**Ecological boundaries generated by coastal upwelling processes"

Invited speaker, Ecology Seminar, Scripps Institution of Oceanography, UC San Diego, Jan. 14, 2015. "The role of the Plankton Community in the Biological Carbon Pump"

Invited Lecturer, Ramon Margalef Summer Colloqium, Barcelona, Spain, July 1-13, 2013

PLOCAN Institute, Telde, Gran Canaria, June 28, 2013
"The North Atlantic Subtropical Gyre: Differences in Nutrient Supply and the Biological Carbon Pump". **Invited presentation.**

Hanse Institute for Advanced Studies, Delmenhorst, Germany, May 29, 2013
"How the Ocean's Biological Carbon Pump Helps to Keep the Planet Cool",
Invited presentation for the Foundation and Fellows of the Hanse Institute, Delmenhorst, Germany.

Seminar speaker. Polytechnic Campus, ASU, Sept. 24, 2013
"How the Ocean's Biological Carbon Pump Helps to Keep the Planet Cool"

Seminar speaker. Alfred Wegener Institute, Bremenhaven, Germany, Oct. 29. 2012, The Role of Ocean Biota in Carbon Flux**.**

Invited speaker, Advisory panel for the reconstitution of a Graduate Program in Environmental Sciences and Engineering, University of Texas at Arlington, November 9, 2012

Invited Lecturer, MEECE (Marine Ecosystem Evolution in a Changing Environment) Summer School, September 2011

ASLO Aquatic Sciences Meeting 2009, Nice, France, Jan. 25-30, 2009 (invited)
Neuer, S., Mohler, J., R. Massana. The oceanic protist community and its contribution to particle flux.

Centre Mediterrani d'Investigacions Marines i Ambientals (CMIMA), **Barcelona, Spain, Oct. 4, 2005.** Biogeochemistry of the Eastern Subtropical North Atlantic Gyre: Results of European Time-series Station ESTOC.

Ocean Carbon and Climate Change (OCCC), Woods Hole Oceanographic Institution (Woods Hole, MA), August 1-4, 2005. S. Neuer. European Time-series Station ESTOC in the Eastern Subtropical North Atlantic Gyre **(invited talk**)

UC Merced, Jan. 10, 2005: Deserts of the Oceans: The biogeochemistry of Subtropical Gyres **(invited)**

Seminar at College of Oceanic and Atmospheric Sciences, Corvallis, OR, Oct. 14, 2003. Neuer, S. The biogeochemistry of the eastern subtropical Atlantic: Results from time-series station ESTOC **(Invited)**

ISME International Society for Microbial Ecology, Cancun, Mexico, Aug. 22-27, 2004. S. Neuer. Microzooplankton grazing and the carbon cycle in the eastern subtropical Atlantic gyre (**invited**)

JGOFS Open Science Conference, Washington, DC, May 5-8, 2003, Neuer, S. Differences in the biological carbon pump within the same biogeographical province: A case study from the subtropical North Atlantic Gyre **(Invited)**

Conference Presentations (Contributed) (2014-present)

Ocean Sciences meeting, San Diego, CA, Feb. 16-21, 2020

K. Dudek, B. N. Cruz, B. Polidoro and **S. Neuer**. Polymer specific or core plastisphere? Using microscopy and DNA based analyses to assess microbial colonization of microplastics in the Caribbean Sea. Talk.

B. N. Cruz, C. L. Shurtleff, C. Fredette-Roman, S.Aouad and S**.Neuer,** TEP Production and Aggregate Formation in Eukaryotic Picophytoplankton. Poster.

S. Neuer, B. N. Cruz and F. DeMartini, The role of Synechococcus and Prochlorococcus in the biogeochemistry of the oligotrophic ocean. Talk.

Ocean Carbon & Biogeochemistry Summer Workshop; June 24-27, 2019; Woods Hole,

MA.

BN Cruz, **S. Neuer**, L. Cunningham, R. Parsons, L. Blanco-Bercial, A. Maas. INVESTIGATING ZOOPLANKTON MEDIATION OF SINKING PARTICLE FLUX IN THE SARGASSO SEA. Poster.

S. Neuer, B. N. Cruz and F. De Martini
SYNECHOCOCCUS AND *PROCHLOROCOCCUS*: A TALE OF TWO CYANOBACTERIA. Poster.

ASLO 2019 Aquatic Sciences Meeting, San Juan, Puerto Rico, Feb. 23-March 2, 2019.

B. Cruz, S. Brozak, and **S. Neuer,** OPTICAL AND DNA-BASED CHARACTERIZATION OF SINKING PARTICLES AT THE BERMUDA ATLANTIC TIME-SERIES STUDY STATION (BATS). Talk.

L. Monks, J. Russell, T.W. Lee, K. Hargrave, P. Fox, S. Myint, and **S. Neuer**, DRONE AND SATELLITE BASED ESTIMATES OF CHLOROPHYLL A AND TAXON-SPECIFIC BIOMASS: A COMPARATIVE APPROACH TO MONITORING ALGAL BLOOMS. Poster.

K. Dudek, B. Polidoro and **S. Neuer**. DEGRADATION AND DEPOSITION: THE ROLE OF BIOTIC AND ABIOTIC PROCESSES IN MICROPLASTICS' FATE IN THE OCEAN. Poster.

AGU 2018 Ocean Sciences Meeting, Portland, OR, 11-16 Feb. 2018

B. N. Cruz, H. Cadillo-Quiroz and **S. Neuer**, The Role of Heterotrophic Bacteria on the Aggregation of Marine *Synechococcus* and *Prochlorococcus*. Poster.

K. Dudek, B. Nahir Cruz, **S. Neuer** and B. Polidoro. The Role of Microbes in the Degradation and Removal of Microplastics from the Ocean's Surface, Poster.

Gordon Research Conference, Hong Kong, China. July 8-13, 2018.
K. Dudek, B. Polidoro, **S. Neuer**. Polymer specific plastisphere – how the chemical composition of microplastics impact its microbiome, degradation, and deposition. Poster.

Ocean Carbon & Biogeochemistry Summer Workshop; June 25-28, 2018; Woods Hole, MA.

BN Cruz, S. Brozak, **S. Neuer**. Molecular and microscopic characterization of sinking particles at the Bermuda-Atlantic Time Series Study station (BATS). Poster.

American Society for Microbiology 56th Annual Meeting; 2017 April 1st; Tucson, AZ.

B. N. Cruz, W. Deng , **S. Neuer**. The Role of Heterotrophic Bacteria on the Aggregation of Marine *Synechococcus* and *Prochlorococcus*. Talk. Graduate Student Best Talk Runner-Up.

K. Dudek, B. N. Cruz, B. Polidoro, **S. Neuer.** The role of microbes on the degradation and removal of microplastics from the ocean's surface. Talk.
K. Roy, B. N. Cruz, **S. Neuer.** Impact of phosphorus limitations on growth rates of marine picocyanobacteria *Prochlorococcus marinus* (MED4). Undergraduate Poster Award Runner Up.

ASLO 2017 Aquatic Sciences meeting, Hawaii, Feb. 26-March 3, 2017.

De Martini, F.; **Neuer, S.;** Dudek, K.; RELATIVE CONTRIBUTION OF CYANOBACTERIA AND PROTISTS IN THE SHALLOW SEDIMENT TRAP MATERIAL IN THE SARGASSO SEA: INDICATION OF FOOD WEB CONTROL. Talk. (Abstract ID: 29195)

Cruz, B. N.; Deng, W.; **Neuer, S**.; HETEROTROPHIC BACTERIA AND THE AGGREGATION OF MARINE *SYNECHOCOCCUS* AND *PROCHLOROCOCCUS* (Abstract ID: 29230)

Cotti-Rausch, B. E.; Condon, R. H.; De Martini, F.; **Neuer, S.;** Lomas, M. W.; Richardson, T. L.; PLANKTONIC FOOD WEB INTERACTIONS UNDER VARIABLE ENVIRONMENTAL CONDITIONS IN THE SARGASSO SEA (Abstract ID: 29521)

Ocean Sciences Meeting 2016, New Orleans, 21-26 February 2016.

F. De Martini and **S. Neuer.** From Grazer Control to Carbon Export: Contrasting the Role of *Synechococcus* and *Prochlorococcus* in the Sargasso Sea. Talk.
W.Deng, **S. Neuer,** L. Monks and B. Cruz. Marine *Synechococcus* Aggregation. Poster
S. Neuer, K. Kinzler, C. Aumack and A.R. Juhl, Export of Algal Communities from Land Fast Arctic Sea Ice Influenced by Overlying Snow Depth and Episodic Rain Events. Poster.

EMBO | EMBL Symposium: A New Age of Discovery for Aquatic Microeukaryotes. Jan. 26-29, 2016. S. Neuer, J. Amacher, F. DeMartini, and S. Wilson. The role of marine protists in export of organic matter in the oligotrophic Sargasso Sea. Selected talk.

Ocean Carbon Biogeochemistry (OCB) summer meeting, Woods Hole, MA, July 20-23, 2015. F. De Martini, **S. Neuer** and D. Hamill, J. Robidart. CYANOBACTERIA, TOO SMALL TO SINK? STRAIN SPECIFIC CONTRIBUTION OF CYANOBACTERIA TO THE CARBON EXPORT IN THE SARGASSO SEA. Poster.

European Geosciences Union General Assembly, April. 12-17, 2015, Vienna, Austria. S. Neuer and H. Benway. Introducing the US Ocean Carbon Biogeochemistry Subcommittee on Ocean Time-Series. Geophysical Research Abstracts, Vol. 17, EGU2015-8098, 2015

S. Neuer, J. Amacher, F. DeMartini, and S. Wilson. Deciphering The Role of Plankton Taxa in Particle Flux. Geophysical Research Abstracts. Vol. 17, EGU2015-8228, 2015

Ocean Carbon Biogeochemistry (OCB) summer meeting, Woods Hole, MA, July21-24, 2014. COUPLED AND UNCOUPLED PREY/PREDATOR RELATIOSHIP LINKED TO THE CARBON EXPORT AT THE BERMUDA ATLANTIC TIME SERIES STATION. F. De Martini, **S. Neuer** and D. Hamill.

IMBER (Integrated Marine Biogeochemistry and Ecosystem Research) Open Science Conference, 23-27 June 2014, Bergen, Norway. Neuer, S., K. Kinzler, C. Aumack and A. Juhl. EXPORT VARIABILITY OF ALGAL COMMUNITIES FROM LAND FAST ARCTIC SEA ICE

Ocean Sciences Meeting 2014, Hawaii, HI, 23-24 February 2014.

De Martini, F.; Neuer, S.; Lomas, M. W.: GROWTH AND GRAZING RATES OF THE PICO AND NANO-PHYTOPLANKTON COMMUNITY AND ITS LINKTO THE CARBON EXPORT AT THE BERMUDA ATLANTIC TIME-SERIES STUDY STATION, Poster.

Kinzler, K. P.; McHugh, C.; Aumack, C.; Juhl, A.; Neuer, S.: TEMPORAL AND SPATIAL EXPORT VARIABILITY OF ALGAL COMMUNITIES FROM LAND FAST ARCTIC SEA ICE, Talk.

Deng, W.; Monks, L.; Neuer, S.: EFFECTS OF CLAY MINERALS ON THE AGGREGATION AND SETTLING OF MARINE *SYNECHOCOCCUS, Poster.*

Aumack, C. F.; **Juhl, A. R.; Neuer, S.:** INFLUENCES OF OVERLYING SNOW ON PARTICLE SINKING VELOCITY FOLLOWING EXPORT FROM LAND FAST ARCTIC SEA-ICE, Poster.

Monks, L.; Deng, W.; Neuer, S.: TIME COURSE EXPERIMENTS OF MARINE *SYNECHOCOCCUS* AGGREGATION

Teaching

At ASU:

BIO 494 Marine Biology, 3 cr., Spring 2008, 2014, 2015, Fall 2016, Spring 2019, 2020

BIO325/GLG325 (formerly GLG 394/BIO394) Oceanography, 3 cr., Spring 2001, Spring 2002, Spring 2003, Fall semesters 2003, 2004, 2005, 2006, 2007, 2008, 2011, 2014, 2015, 2018, 2019, 2020

BIO 598, Special Topics: Writing A NSF-GRFP, 1cr. Fall 2016, Spring 2017, 2018

BIO 189, Recitation in Global Climate Change, 1 cr., Fall 2011, Fall 2012, Fall 2016

BIO 598, Special Topics: Biological Oceanography, 1cr. Spring 2017, 2018

ELS 502, Environmental Life Sciences, Field Camp, 4 cr, Spring 2009, 2012, 2014

ELS 501, Environmental Life Sciences, Grand Challenge: Climate Change, 3 cr, Fall 2009, Fall 2011, Fall 2012, Fall 2013

BIO/GPH 598 IPCC and Climate Change, 1 cr. (co-taught with Anthony Brazel, School of Geography), Spring 2008

BIO/CHM/GLG 494/598 Ocean Biogeochemistry, 3 cr., Spring 2007, Spring 2009

BIO 320 Fundamentals of Ecology, 3 cr., Spring 2006

BIO 591 Readings in Ocean Biogeochemistry, 1 cr., Spring 2006

GLG 101 Introduction to Physical Geology, 3 cr., Spring semesters 2003, 2004

GLG 194 Oceanography: An Introduction to Marine Science, 3 cr., Fall semesters 2001, 2002

BIO 494, Marine Science, ITESM Campus, Guaymas, Mexico, Jan. 4-18, 2003 (team taught). Part of ASU's MARC (Minority Access to Research Careers) program, for Native American and Hispanic students

At Bremen University:

Biological–Physical Interactions in Oceanography, 3 credit course, graduate level, Univ. Bremen, spring semesters 1997, 1998

Plankton Ecology, 3 credit lab course, graduate level, Univ. Bremen, winter semesters 1996, 1997, 1998

At Oregon State University and University of Washington:

Biological Oceanography, 1-week course for high-school teachers, Hatfield Marine Science Center, Newport, Oregon, summer 1990

Ocean 101, TA, Univ. of Washington, 1988

Mentoring

General

Mentor, Aquatic Sciences Meeting, Honolulu, Feb. 26-March 3, 2017

Mentor, Ocean Sciences Meeting, New Orleans Feb. 21-26, 2016

Mentor, IMBER (Integrated Marine Biogeochemistry and Ecosystem Research) Open Science Conference, 23-27 June 2014, Bergen, Norway

Mentor, ASLO Aquatic Sciences meeting, Feb. 17-22, 2013

Mentor, IMBER-IMBIZOIII, Goa, India, Jan. 28-31, 2013

Mentor, Obama fellowship program, FY 2009/10

Faculty Honors Advisor, Barret, The Honor's College, ASU, 2009-present

President, Central Arizona Chapter, Association for Women in Science (AWIS), 5/2008-06/2010
Vice President, Central Arizona Chapter, Association for Women in Science (AWIS), 5/2007-5/2008
Member, Minority Graduate Education at Mountain States Alliances (MGE at MSA), 2001-2009
Member, UMEB (Undergraduate Mentoring in Environmental Biology); SOLUR (School of Life Sciences Undergraduate Research), 2005-present
Mentor, Minorities Striving and Pursuing Higher Degrees of Success Program (MS and PhD Program), JGOFS Final Science Conference, May 5-8, 2003

Graduate student mentoring

Chair of PhD and MS committees

Current:
Marc Fontanez-Ortiz, MS in Microbiology (Aug. 2020-)

Bianca Cruz, MS Biology (AY 2016), then PhD Environmental Life Sciences (Aug. 2017-)

Kassandra Dudek, PhD Environmental Life Sciences (Aug. 2016-)

Tiffany Lewis, PhD Environmental Life Sciences (co-advised with Beth Polidoro, Feb. 2019-)

Nicole Coots, PhD Evolutionary Biology (co-advised with Gillian Gile, Aug. 2019-)

Ashley Foster, MS BIology, (Aug. 2019-)

Catrina Shurtleff, MS in Microbiology, (Jan. 2020-)

Kylie Denton (co-advised with Jesse Senko), 4+1 accelerated MS in Biology (Aug. 2019-)

Completed:
Jazmine Russell, MS, Sustainability (July 2018): "Monitoring Algal Abundance and Water Quality in Arizona Reservoirs Through Field Sampling and Remote Sensing."

Megan Wolverton, MS, Biology (07/2016): “Bottom-up and Top-down Controls on the Microzooplankton”.

Francesca de Martini, PhD, Environmental Life Sciences (05/2016): “Growth and Grazing Mortality of Pico-and Nano-Phytoplankton and Their Role in the Carbon Export in the Sargasso Sea”. Currently: Faculty, Mesa Community College

Wei Deng, PhD, Environmental Life Sciences (05/2016): “Aggregation of Marine Pico-Cyanobacteria”. Currently: China

Kyle Kinzler, MS, Biology (12/2014): “Temporal and Light-Dependent Variability of Algal Communities In Land-Fast Arctic Sea Ice.”Currently: Biology/AP Biology Teacher Westview High School, Beaverton, OR

Darren Sversvold, MS, Biology, July 2012: El Niño Southern Oscillation Influences on Precipitation, Discharge, and Nutrient Concentrations in the Upper Salt River Watershed in Arizona.” Currently: Water Economic Analyst, Phoenix, Arizona Area Environmental

Services

Tyler Sawyer, MS, Biology, July 2011: "The Ecology of the Plankton Communities of Two Desert Reservoirs". Currently: High School teacher, Phoenix.

Amy Hansen, MS, Microbiology, December 2010: "Seasonal and Interannual Variability of the Sargasso Sea Plankton Community". Currently: Production Editorial Associate, Annual Reviews, Palo Alto, CA

Jessica Amacher (neé Mohler), PhD, Biology, July 2011: "Protist and Cyanobacterial Contributions to Particle Flux in Oligotrophic Ocean Regions". Currently: Argonne National Laboratory, Lemont, IL.

Shikha Gupta, MS, Computational Biosciences, August 2010 : "The application of MERIS full resolution data to estimate algal blooms in central Arizona reservoirs". Currently: Business Analyst at Amazon

Brian Eddie, MS, Microbiology, May 2008: "Influence of Temperature and Salinity on Growth Rate and Morphology of an Arctic Chlorophyte". PhD graduate, University of Delaware (Jan. 2013), Naval Post Doctoral Fellow at the Naval Research Laboratory, Washington, DC. Currently: Researcher, Naval Research Laboratory, Washington, DC.

Jessica Mohler, MS, Biology, December 2007: "Molecular Approach to Determine Contributions of Eukaryotic Protists to Downward Particle Flux in the Ocean". Currently: See Jessica Amacher (neé Mohler) above.

Graduate Student Mentoring; Member of PhD and MS committees

Charles Rolsky, PhD in Biology, July 2020

Joshua Wray, PhD in Molecular and Cell Biology, May 2019.

Theresa Lau, MS in Civil, Environmental, and Sustainable Engineering, May 2018.

Çağlar Yumruktepe, PhD, Oceanography, Institute of Marine Sciences, Middle East Technical University, Erdemli-Mersin, Turkey, Dec. 2016.

Shufang Ci, PhD, Biological Design (05/2017)

Nikos Lessios (07/2016), PhD, Biology

Courtney Courrier (07/2015), MS Biology

Hilairy Emick (05/2015), PhD, Environmental Life Sciences (student left program)

Natalie Myers (5/2013), MS, Microbiology

Jieying Wu (09/2013), PhD, Microbiology

Edgardo Ramirez (12/2010), PhD, Microbiology

Jenifer Rupnow (12/2007), MS, Biology, ASU

Mike Rothrock (08/2005), PhD, Microbiology, ASU

Postdoctoral Mentoring

Dr. Jessica Amacher, ASU, 2011; currently: Argonne National Laboratory, Lemont, Illionois.

Dr. Stephanie Wilson, ASU, 2011; currently: Lecturer, University at Bangor, Wales, UK.

Dr. Peer Helmke, ASU, 2005-2006; currently: Researcher, Bundesanstalt fuer Gewaesserkunde (Federal Bureau of Water Research), Koblenz, Germany

Dr. Andres Cianca, ASU, 2005-2006, currently: Senior Researcher, Plataforma Oceanica de Canaria (PLOCAN), Telde, Gran Canaria, Spain.

Undergraduate mentoring (>50):

(SOLUR: School of Life Sciences Undergraduate Research**)**

Advisor, Undergraduate research projects of Jennifer Laliberte (Spring, Fall 2001); Brian Eddie (Fall2002; Spring, Fall 2004, Spring 2005; **Honors Thesis**), Alison Goode (Fall 2002); Linda Roehrborn (Fall 2002, Spring 2003); Gwen Hoenecke (Fall 2003 - Spring 2005, **Senior Thesis**), Libby Hicks (Fall 2003), Alexis Pasulka (Fall 2004 - Fall 2005, **Senior Thesis, SOLUR**), Ian Anderson (Spring 2005), Jaime Vasche (Spring 2005), Steve Berman (Spring 2006), Patricia Hester (Fall 2006, **SOLUR**), My Truong (Fall 2006, Spring 2007, **SOLUR**), Kyle Hickman (Spring 2007), Ryan Maloney (Spring 2007), Carmen Berrios, Univ of Puerto Rico (Summer 2007), Rebecca Mestek (Fall 2007- Summer 09, **SOLUR**), Amelia Rana (Spring 2008), Charles Baysinger (Spring 2008-Fall 2008, **SOLUR**, Benjamin Brugman (Fall 2008-Sping 2009; Fall 2009 as **NASA Space Grant Student**), Alexandra Freibott (Spring 2009-Spring 2011, **SOLUR, Honor's Thesis**), Alissa Rickborn (Summer 2009-Spring 2010, **SOLUR**), Kimberly Mohabir (Spring 2010-Spring 2012, **NASA Space Grant**), Aaron Robinson (Fall 2010), Mark Wiener (Spring, Fall 2011), Megan Wolverton (Fall 2011 - Fall 2012), Marissa Ivie (Fall 2011, Spring 2012), Kelly Lintecum, **Honor's Thesis**, Spring 2012, Cora McHugh (Spring 2012-Fall 2013, **SOLUR**), Logan Monks (Fall 2012-2013, **SOLUR**), Demetra Hamill (Summer 2012-Spring 2013, **Honor's Thesis**), Janelle Matura (Fall 2013 – Spring 2014, **Barrett, The Honors College),** Holly Celaya (Spring 2014-Fall 2015, **Barrett, The Honors College),** Elena Sacco (Spring 2014, **Barrett, The Honors College),** Maira Nieto (Biochemistry, Spring 2014-Fall 2015), Ryan Gasbarro (Fall 2014-Spring 2015, **Barrett, The Honors College, Honors thesis),** Bianca Cruz (Spring-Fall 2015, recipient of **CLAS Undergraduate Summer Enrichment** grant, spring 2016, **Deans Medalist),** Franklin Keck (Spring 2015), Nate Munoz (Fall 2015), Daniel Jasso-Selles (Spring 2016-spring 2017), recipient of **CLAS Undergraduate Summer Enrichment** grant, 2016), Thomas Hulen (Fall 2016), Luis Romero (Spring/summer 2017), Jonathan Durkin (fall 2017, **NASA Space Grant** student, **Barrett, The Honors College**), Catrina Shurtleff (summer 2017-fall 2018), Celeste Delaune (fall 2017, **NASA Space Grant** student), Patricia Ibalo (spring 2017-fall 2018), Makena Diller (Biochemistry, spring 2017-fall 2018), Ekta Patel, **Barrett, The Honors College** (spring 2018-fall 2018), Samantha Brozak (Mathematics, fall 2017-fall 2018), Tyla Kanteena (fall 2017-spring 2018), Kevin Roy **Barrett, The Honors College, Honors thesis** (Fall 2016-May 2019), David Flesher, **Barrett, The Honors College, Honors thesis** (May 2019), Dan Johnson (fall 2018-spring 2019), Nisha Velu (spring 2019-spring 2019), Samer Aouad, **Barrett, The Honors College** (fall 2018-present), Lindsey Cunningham (summer 2019-present), Cassidy Fredette-Roman, **Barrett, The Honors College** (spring 2019-fall 2019), Nadia Alina (**Barrett, The Honors College,** fall 2019-present), Britni Livar, **Barrett, The Honors College** (fall 2019-),

High School Student: Kaitlyn Boisvert (2012-2014), "Effects of climate change on marine phytoplankton". Won several science fair prices for her project: Semi-finalist for the Young Naturalist Awards 2015, 1st Place award, poster division of the Jr. Science & Humanities Symposium held at ASU 2015, and SemiFinalist for the Intel Science Talent Search 2016.

Service

National/International (some are also listed under 'Leadership positions' on p.1)

Site reviewer, Scripps Institution for Oceanography, November 2019
Panelist, NSF, Washington, DC, September 2019
Site reviewer, Geomar, Helmholtz Center for Ocean Research, Kiel, Germany, October 2017
Associate Editor, Deep-Sea Research I, 08/2015-present
Panelist, NASA Ocean Biology and Biogeochemistry program, Washington, DC, June 2017
Vice-Chair (2018) and **Chair** (2021) (elected), Gordon Research Conference on Ocean Biogeochemistry
ASLO Vice-chair, Organizing Committee, Ocean Sciences Meeting, New Orleans, Feb. 21-26, 2016
Organizer, Ocean Sciences 2016 Town Hall: The future of ocean biogeochemical time-series ASLO/AGU Ocean Sciences Meeting, New Orleans, 21-26 Feb. 2016
Site Reviewer, German Research Foundation (DFG), Kiel, Germany, October 2015
Member, Ocean Carbon and Biogeochemistry (OCB) Scientific Steering Committee, 2014-2016
Chair, Ocean Time-series Committee, a subcommittee of the OCB, 2014-2016
Member (elected), Ocean Carbon and Biogeochemistry (OCB) Ocean Time-Series Advisory Committee, July 2012- 2016.
Panelist, National Science Foundation, Ocean Acidification, March 2013
Organizer, Town Hall on Career-Life Balances, ASLO/AGU Ocean Sciences Meeting, Salt Lake City, 19-25 Feb. 2012
Site Reviewer, German Research Foundation (DFG), Kiel, Germany, September 2011
Member, Scientific Steering Committee, Global Biogeochemical Flux Program, Ocean Observatories Initiative, 2010-2011
Board of Directors (elected), Association for Women in Science, Washington, DC. Jan. 2009-Dec.2012
Panelist, National Science Foundation, Office of Polar Programs, September 2010
ASU Representative, Arctic Research Consortium of the US (ARCUS), 2006-2013.
Panelist, National Science Foundation, 'Carbon and Water', June 2006
Member, NASA Science Definition Team for Jupiter Icy Moon Orbiter (JIMO), 2003-2005
Panelist, EPA STAR fellowship, 2001, 2002
Advisor, ESTOC (European Station for Time-Series in the Ocean, Canary Islands) 1997-2005
Steering member, CANIGO (Canary Islands Azores Gibraltar Observations) (EU funded large-scale project involving 51 institutions), 1996-1999

Chief Scientist on Research Expeditions
R.V. "Meteor", M45/5, 1999
R. V. "Poseidon", POS 248, 1999
R. V. "Poseidon", POS 237, 1998
R.V. "Victor Hensen" VH97/3, 1997
R.V. "Victor Hensen", VH96/1, 1996

Special session chair at international conferences

ASLO 2017 Aquatic Sciences meeting, Hawaii, Feb. 26-March 3, 2017. "Trophic Interactions as Modifiers of Carbon and Nutrient Cycles in the Ocean", with Tammi Richardson, Univ. of South Carolina

Ocean Sciences Meeting 2016, New Orleans, 21-26 February 2016, Co-organizer of Town hall meeting on the "Future of Ocean Biogeochemical Time-Series"

Ocean Carbon Biogeochemistry (OCB) summer meeting, Woods Hole, MA, July 20-23, 2015. Studying spatial and temporal variability in the ocean with shipboard and autonomous platforms. Chairs: Susanne Neuer, Michael Lomas, Angel White
EGU General Assembly, Vienna, Austria, April 12-17, 2015. OS4.6: Advances in open ocean water column observations at fixed locations. Convener: Richard Lampitt, Co-Conveners: Luisa Cristini, Nicholas Bates, **Susanne Neuer**, Vanessa Cardin, Matthew Church, Eric Delory, Mary Jane Perry

Ocean Carbon Biogeochemistry (OCB) summer meeting, Woods Hole, MA, July21-24, 2014. New insights into the biology and biogeochemistry of the mesopelagic zone
Chairs: Susanne Neuer (ASU), Carol Arnosti (UNC), Bethany Jenkins (URI).

ASLO 2013 Aquatic Sciences meeting, New Orleans, 17-22, 2013. "Biology and Biogeochemistry of Sea Ice Communities", with Andrew Juhl, Columbia University.

ASLO/AGU Ocean Sciences Meeting, Salt Lake City, 19-25 Feb. 2012,
SS 147: 'Infusing Biogeochemistry with Ecosystem Science' (with Raleigh Hood, University of Maryland); **SS146:** 'Zooplankton Feeding Ecology and the Biological Carbon Pump in the Ocean', co-convenor with Dr. Stephanie Wilson, Arizona State University/ Bangor University).
ASLO/AGU Ocean Sciences Meeting, Portland, 22-26 Feb. 2010, IT30: 'The Biogeochemistry of the North Atlantic in a Global Context: Bringing Together Recent Advances in Modeling and Observations' (with Dr. Ray Najjar, Penn State).

ASLO/AGU Ocean Sciences Meeting, Orlando, March 2-7, 2008: 'Time-series observations of biogeochemical processes and their long term trends' (with Drs M. Lomas, F. Mueller-Karger, L. Lorenzoni).

ASLO/AGU Ocean Sciences Meeting, Hawaii, Feb. 2006, OS106: 'Role of Ocean Biota in Carbon Flux' (with Dr. Ricardo Letelier, Oregon State University)

American Geophysical Union, Fall meeting, San Francisco, CA, Dec. 10-14, 2001:
'Oceanography of the Eastern Boundary Region of the Subtropical North Atlantic Gyre' (with Dr. Gregorio Parrilla)

ASLO Aquatic Sciences meeting, Albuquerque, NM, Feb. 12-16, 2001: 'Revisiting Redfield: C:N:P stoichiometry in aquatic ecosystems' (with Dr. James Elser)

<u>At ASU (some of these are stated under 'Leadership Positions') on p. 1</u>
Elected Member, University Senate, 08/2020-present.
Associate Director for Graduate Studies, SoLS, July 1, 2015-Dec. 31, 2018
Member, search committees for faculty hires for the Center for Applied and Fundamental Microbiomics, fall 2018-spring 2019; fall 2019-spring 2020
Assistant Director for Graduate Studies, SoLS, fall 2013-spring 2015

Invited Panelist, "JumpStarting STEM Careers", January 8, 2016
Invited Panelist, "New Asst. Prof. Workshop Series", Aug. 2014
Invited Panelist, "Up, up and away: Understanding inter-, multi-, and trans-disciplinary proposals", Office of Knowledge Enterprise Development (OKED), Nov. 18, 2014
President, Faculty Women Association, AY 2014/2015
President-elect, AY 2013/2014, Faculty Women Association, ASU
Board member, Faculty Women Association, fall 2012-present
Member, search committee for a faculty hire in "Bacterial Genomics", fall 2013/spring 2014, fall 2014-spring 2015
Member, search committee for a faculty hire in "Photosynthesis", fall 2014-spring 2015
Member, search committee for a targeted faculty hire in "Borderlands Initiatives", fall 2014-spring 2015
Founding Director, Graduate Program "Environmental Life Sciences", Dec. 2008-August 2013
Acting director, working group responsible for the formation of the interdisciplinary graduate program "Environmental Life Sciences", May-Dec. 2008
Member, Undergraduate Committee, SoLS, 2011-2012.
Member, Committee, formation of a minor in Sustainability, fall 2009
Member, EEES personnel committee, AY 2009/10.
Member, search committee for a faculty hire in "Global Ecology", spring 2010
Chair, Selection committee for the Lisa Dent Memorial Fellowship in Ecology, April, 2008
Member, SOLUR Researcher selection committee, Spring 2007, 2008, 2010
Member, Library Committee (SoLS), 2006-2011
Member, Awards Committee (SoLS), 2005-2006
Member, (SoLS), Research and Training Initiatives committee, 2005
Member, planning committee for future School of Earth and Space Exploration (SESE), ASU, 2004-2005

Community Service/Outreach

Invited speaker: Spirit of the Senses, Salons, "Oceans and Climate Change", Feb. 24, 2020

ASU Homecoming Block Party, Nov. 23, 2019, Lab group participated in Theme: **"**Mysteries of the Microscopic World"

ASU 2018 Day of the Open Door, Feb. 24, 2018. Organized activities with lab group under the theme: "Plankton in Lakes and Oceans".

ASU Ask-A-Biologist: "Frozen Life" http://askabiologist.asu.edu/frozen-life, website featuring content, video, and work materials and teachers for the public and K-12 students on life in the Arctic sea ice, completed summer 2015

Featured on "STEM Journals", a COX Channel 7 series on STEM education, first broadcast November 17, 2013.

ASU Ask-A-Biologist: "Invisible watery world"
https://askabiologist.asu.edu/explore/plankton, website featuring content, video, and work materials and teachers for the public and K-12 students on plankton, completed summer 2013

Invited evening lecture: "The Fate of Coral Reefs", Arizona Science Museum, April 6, 2012

Organized (with lab group) Marine Science visit/activities for >40 school children at ASU, Dec. 7, 2010

Participant (with lab group), Ocean Adventures at Changing Hands bookstore, May 23, 2009

Invited panelist, Randy Olson's movie: "Sizzle", ASU, Feb. 4, 2009
Moderator, Panel discussion, "What has changed for women in science since Darwin?, ASU, Feb. 10, 2009
Organizer, Workshop on Plankton for Middle School Girls, Arizona Science Center, Phoenix, AZ, Feb. 2009
Faculty ambassador, ASU (2004-2008), 5 guest presentations on oceanography in K-12
Invited speaker for "Spirit of the Senses" a Phoenix based philanthropy organization (2005-2010): "Life in the Oceans ", "Role of Oceans in Climate Change", "Life in Europa's Ocean?, "Trash Islands in the Ocean" and "Gulf of Mexico Oil Spill"
Invited speaker for the McDowell Conservancy, June 2008
Invited panelist, Al Gore's movie: "An inconvenient truth", Global Institute for Sustainability, January 2007
Workshop Leader, Sally Ride Science fair, March 2007, 2008
Initiator and Co-Organizer, SoLS Takes a Hike (yearly outreach event in the School of Life Sciences), 2006, 2007, 2008, 2010, 2012, 2013, 2014,2015
Volunteer, Ask a Biologist, SoLS, 2004-present.
Poster judge: Intel-ISEF fair, May 10-11, 2005
Coach, Natural Sciences topic 'Oceanography', 2002/3 Academic Decathlon (national High School competition) and **Super Quiz Speaker**