Nicholas Baetge

Postdoctoral Scholar (he, him)

Education

- 9/1/14- Ph.D, Ecology, Evolution and Marine Biology, UC Santa Barbara.
- 6/11/21 o The Bioavailability of Seasonally Accumulated Dissolved Organic Carbon and its Contribution to Export in the Western North Atlantic Basin
 - PI: Craig Carlson
- 9/1/09- **B.S. with Distinction**, *Ecology*, *Evolution and Marine Biology*, UC Santa 6/1/13 Barbara.
 - o Mucosal microbial assemblages of wild and cultured intertidal finfish
 - o PI: Peter Collins and Craig Carlson

Employment

- 2021–Pres. Postdoctoral Scholar. Oregon State University
- 2013–2014 Junior Research Specialist. UC Santa Barbara

Grants

- 2017 ACIDD: Across the Channel, Investigating Diel Dynamics. UC Santa Barbara Coastal Fund. \$12K
- 2017 ACIDD: Across the Channel, Investigating Diel Dynamics. UC Ship Funds. $\$240\mathrm{K}$
- 2017 Sydney L Wright Fellowship. Bermuda Institute of Ocean Sciences. \$960
- 2013 Growth, bacterial resilience, and mucosal microbial assemblages of wild and cultured intertidal finfish along the California coast. UC Santa Barbara Coastal Fund. \$3.5K

Awards and Honors

- 2014 US Congressional Antarctic Service Medal.
- 2013 Leal Ann Kerry Mertes Scholarship. UC Santa Barbara Geography
- 2012 Undergraduate Research and Creative Activities Award. UC Santa Barbara
- 2011 Undergraduate Research and Creative Activities Award. UC Santa Barbara

Publications

- in revision Seasonal mixed layer dynamics shape phytoplankton physiology, viral infection, and accumulation in the North Atlantic, Diaz et al., Nature Communications.
- in revision Investigating atmospheric inputs of dissolved black carbon to the Santa Barbara Channel during the Thomas Fire (California, USA), Wagner et al., JGR Biogeosciences.
 - 2021 Seasonality of the microbial community composition in the North Atlantic, LM Bolaños, CJ Choi, AZ Worden, N Baetge, CA Carlson, SJ Giovannoni, Frontiers in Marine Science. 8, 23.
 - 2021 Role of Sea Surface Microlayer Properties in Cloud Formation, BN Hendrickson, SD Brooks, DCO Thornton, RH Moore, E Crosbie, ..., Frontiers in Marine Science. .
 - 2021 The Seasonal Flux and Fate of Dissolved Organic Carbon through Bacterioplankton in the Western North Atlantic, N Baetge, MJ Behrenfeld, J Fox, KH Halsey, KDA Mojica, A Novoa, ..., Frontiers in Microbiology. 12, 1547.
 - 2020 Seasonal Differences and Variability of Concentrations, Chemical Composition, and Cloud Condensation Nuclei of Marine Aerosol over the North Atlantic, G Saliba, CL Chen, S Lewis, LM Russell, PK Quinn, TS Bates, TG Bell, ..., Journal of Geophysical Research: Atmospheres. 125 (19).
 - 2020 Different carboxyl-rich alicyclic molecules proxy compounds select distinct bacterioplankton for oxidation of dissolved organic matter in the mesopelagic Sargasso Sea, S Liu, R Parsons, K Opalk, N Baetge, S Giovannoni, LM Bolaños, ..., Limnology and Oceanography. 65 (7), 1532-1553.
 - 2020 Net Community Production, Dissolved Organic Carbon Accumulation, and Vertical Export in the Western North Atlantic, N Baetge, JR Graff, MJ Behrenfeld, CA Carlson, Frontiers in Marine Science. 7, 227.
 - 2020 California wildfire burns boundaries between science and art, KM Bisson, N Baetge, SJ Kramer, D Catlett, G Girling, H McNair, ..., Oceanography. 33 (1), 16-19.
 - 2020 Stable isotope probing identifies bacterioplankton lineages capable of utilizing dissolved organic matter across a range of bioavailability, S Liu, N Baetge, J Comstock, K Opalk, RJ Parsons, E Halewood, ..., Frontiers in Microbiology. 11, 2364.

- 2019 The north atlantic aerosol and marine ecosystem study (NAAMES): Science motive and mission overview, MJ Behrenfeld, RH Moore, CA Hostetler, J Graff, P Gaube, LM Russell, ..., Frontiers in Marine Science. 6, 122.
- 2019 Factors driving the seasonal and hourly variability of sea-spray aerosol number in the North Atlantic, G Saliba, CL Chen, S Lewis, LM Russell, LH Rivellini, AKY Lee, PK Quinn, ..., Proceedings of the National Academy of Sciences. 116 (41), 20309-20314.

Presentations

Selected Research Talks

- Nov 2019 Net community production, dissolved organic carbon and export in the Western North Atlantic, ERI BGS Seminar, UC Santa Barbara, CA.
- Jun 2019 **DOM accumulation driven by ecosystem state**, NAAMES All-Scientists Meeting, NASA LaRC, VA.
- Jan 2019 ROAM-ing on ACIDD, GEOG 264 Seminar, UC Santa Barbara, CA.
- Jun 2018 **DOC** bioavailability, bacterial production and carbon demand, NAAMES All-Scientists Meeting, Oregon State University, OR.
- Feb 2018 **DOC** bioavailability and evidence of priming effect in the western North Atlantic, American Geophysical Union Ocean Sciences Meeting, Portland, OR.
- Feb 2017 Estimating DOC bioavailability with marine bioreactors, American Society for Limnology and Oceanography Aquatic Science Meeting, Honolulu, HI.

Selected Posters

- Feb 2020 Dissolved organic carbon accumulation and export potential in the Western North Atlantic, American Geophysical Union Ocean Sciences Meeting, San Diego, CA.
- Jun 2018 Daily rhythms disrupted: the effects of Thomas Fire ash on biogeochemical cycles in the Santa Barbara Channel, Coastal Fund Gala, UC Santa Barbara, CA.
- Jun 2018 Bacterial remineralization of DOM, NAAMES All-Scientists Meeting, Oregon State University, OR.

- May 2017 Bacterial carbon and growth efficiencies in the North Atlantic, $NAAMES\ All\text{-}Scientists\ Meeting,\ NASA\ LaRC,\ VA.$
- Oct 2016 **Bioavailability and fate of DOM**, *NAAMES All-Scientists Meeting*, Oregon State University, OR.
- Oct 2015 NAAMES DOM dynamics, characterization, and bioavailability, NAAMES All-Scientists Meeting, NASA LaRC, VA.

Teaching Experience

- 2018–2020 Marine Microbiology Laboratory (EEMB 144L) TA. UC Santa Barbara
- 2015–2016 Introductionary Biology Laboratory (EEMB 3L) TA. UC Santa Barbara Mentorship
- 2018–2019 Ruby Korpics. UC Santa Barbara

Cruise Experience

- 2018 NAAMES, R/V Atlantis. 26 days
- 2017 BIOS-SCOPE, R/V Atlantic Explorer. 4 days
- 2017 NAAMES, R/V Atlantis. 26 days
- 2017 ACIDD, R/V Sally Ride, Chief Scientist. 6 days
- 2016 NAAMES, R/V Atlantis. 26 days
- 2016 BIOS-SCOPE, R/V Atlantic Explorer. 4 days
- 2014 CLIVAR P16S, R/V Nathaniel B. Palmer. 46 days
- 2014 MCR-LTER, R/V Kilo Moana. 11 days
- 2013 BIOS, R/V Atlantic Explorer. 2 days

Service

- NA-2021 NASA EXPORTS Alternate. Southampton, UK
- $2020\hbox{--}2021$ $\,$ Tutor the Future. Santa Barbara
- 2020–2021 IGPMS DEI Working Group. UC Santa Barbara
 - 2019 Sacramento Graduate Research Day Delegate. UC Santa Barbara
 - 2019 Ocean Portal Marine Microbes Contributor. Smithsonian Institution
- 2016–2018 EEMB/IGPMS Graduate Student Advisory Committee. UC Santa Barbara
- 2016–2017 Marine Science Seminar Coordinator. UC Santa Barbara
- 2014–2017 IGPMS Social Chair. UC Santa Barbara

Manuscript Reviews

Science Advances (1), Aquatic Microbial Ecology (1), ISME (1)

Professional Development

Oregon State University

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- 2013 Microbial Oceanography Summer Course. Bermuda Institute of Ocean Sciences
- 2020 Personal Survival Techniques (TRAINRL-363). Training Resources Maritime Institute