

DEBORAH A BRONK
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EDUCATION

Ph.D., Marine Estuarine and Environmental Sciences, Horn Point Laboratory,
University of Maryland, College Park, MD, June 1992.
B.S., Biology and Marine Science, University of Miami, Miami, FL, May 1986.

ACADEMIC POSITIONS

2018-present President and CEO, Bigelow Laboratory for Ocean Sciences, East Boothbay, Maine
2016-2018 Chair, Department of Physical Sciences, Virginia Institute of Marine Science (VIMS), College of William & Mary, Gloucester Point, VA
2016-2018 Moses D. Nunnally Distinguished Professor of Marine Science, VIMS
2015-2016 Vice-chair, Department of Physical Sciences, VIMS
2014-2018 Director, VIMS Flow Cytometry Facility, VIMS
2013-2015 Division Director, Division of Ocean Science, National Science Foundation (NSF), Arlington, VA (*took a leave of absence to serve at NSF*)
2012-2013 Section Head, Ocean Science Section, NSF
2011-2012 Federal Science and Research Liaison, VIMS
2007-present Professor, VIMS, College of William & Mary
2000-2006 Associate Professor, VIMS, College of William & Mary
1999-2000 Associate Professor of Marine Sciences, University of Georgia, Athens, GA
1994-1999 Assistant Professor of Marine Sciences, University of Georgia
1992-1993 Postgraduate Researcher, University of California, Santa Cruz, CA

AWARDS and ELECTED OFFICES

2021 Visionary Leader, Council of Scientific Society Presidents
2021-2026 President, The Oceanography Society (TOS), Elected to serve two years as president-elect, two years as president, and two years as past-president
2021-2026 Chair, University-National Ocean Laboratory System (UNOLS) Council
Elected to serve two years as chair-elect, two years as chair, and two years as past-chair
2020 Fellow, American Association for the Advancement of Science
2019-2022 Elected Member-at-Large, Consortium of Ocean Leadership
2018 Outstanding Faculty Award, the state of Virginia's highest honor for faculty at Virginia's public and private colleges and universities, awarded by the State Council of Higher Education for Virginia
2017-2019 Chair-elect, Council of Scientific Society Presidents (CSSP). Elected to serve one year as Chair-elect, one year as Chair, and one year as Past-Chair. CSSP member societies represent over a million U.S. scientists.

2015	Sustaining Fellow of the Association for the Sciences of Limnology and Oceanography (ASLO)
2011	Plumeri Award for Faculty Excellence, The College of William & Mary
2011-2012	Elected Treasurer, Council of Scientific Society Presidents
2009-2010	Elected Member-at-large, Council of Scientific Society Presidents
2009	Dean's Prize for the Advancement of Women in Science
2008-2011	Member, U. S. Carbon Cycle Science Plan Working Group, assembled to set national research priorities in integrated (ocean, land, and atmosphere) carbon cycle for the coming decade
2008-2014	Elected President, ASLO. Two years as President-elect, two years as President, and two years as Past-President
2006-2009	Inaugural Member, Ocean Carbon and Biogeochemistry (OCB) Scientific Steering Committee (SSC) assembled by NSF, NOAA, and NASA to set priorities and develop programs for the study of ocean biogeochemistry and carbon cycling
1996	Lindeman Award recipient. Award is given annually by ASLO for the outstanding paper in aquatic sciences by a young scientist
1995	Recipient of the Antarctic Service Medal
1993	Selected participant in the Dissertations Symposium on Chemical Oceanography (DISCO) meeting, Honolulu, HI

INSTRUCTION – College professor from 1994 to 2018

Courses taught:

Introduction to Marine Science, College of William & Mary
 Guest instructor for the Center for Microbial Oceanography: Research and Education (CMORE), Microbial Oceanography: Genomes to Biomes, University of Hawaii
 Harmful Algal Blooms, VIMS
 Coastal and Estuarine Processes and Issues, VIMS
 Stable Isotope Biogeochemistry, VIMS
 Aquatic Dissolved Organic Matter, VIMS
 Man's Relationship with Nature, VIMS
 Chemical and Biological Oceanography, University of Georgia (UGA)
 The Marine Environment, UGA
 Biological Oceanography, UGA
 Chemical and Biological Oceanography, UGA
 General Oceanography, UGA

Mentoring

Post-doctoral Advisor

2013-2014	Steven Baer (VIMS)
2011-2013	Lynn Killberg-Thoreson (VIMS)
2009-2012	Rachel Sipler (VIMS; transitioned to Research Scientist 2012-2018)
2008	Robert Condon (VIMS)

Major Advisor – Graduate

2016-2021	Brianna Stanley, Ph.D. Student (VIMS)
2019-2020	Quinn Roberts, M.S. Student (VIMS)
2010-2017	Jenna Spackeen, Ph.D. Student (VIMS)
2008-2011	Carolina Funkey, M.S. Student (VIMS)
2007-2013	Steven Baer, Ph.D. Student (VIMS)
2004-2011	Lynn Killberg, Ph.D. Student (VIMS)
2001-2008	Paul B. Bradley, Ph.D. Student (VIMS).
2002-2006	Joel Hoffman, Ph.D. Student (VIMS)
1998-2003	Jason H. See, Ph.D. Student (UGA/VIMS).
1997-2000	Dirk J. Koopmans, M.S. Student (UGA).

Student Committee Service

Served on 16 PhD committees at VIMS and UGA

Served on 10 MS committees at VIMS and UGA

Visiting Students

Hosted students from China, Spain and Denmark

Undergraduate and High School Mentor – over 20 students through the years

FELLOWSHIPS AND GRANTS

Academic Fellowships, Grants, etc. Awarded by Outside Agencies

Creatine cycling in marine bacteria and phytoplankton assemblages

NSF: Biological Oceanography (OCE-1635369), Bronk part \$387,999, Wawrik B (PI, U Oklahoma), Z Yang, and **D Bronk (Co-PI)**

Is nitrogen fixation widespread in the Chukchi and Beaufort Seas?

NSF: Arctic Natural Sciences (ANS-1504307), 12/15 to 11/18, \$405,188

Sipler, R (PI) and **D Bronk (Co-PI)**

GOALI: Effluent Dissolved Organic Nitrogen – Compound Level Assessment of Sources Sinks

NSF: Environmental Engineering (ENG-151120), 6/15 to 5/18, \$329,677

Bronk, D (PI) and R Sipler (Co-PI)

**** Note that during my service at NSF my name had to be removed from new federal grants or a substitute PI had to be named for existing federal grants. R. Sipler assumed the role of substitute PI.***

Nitrogen and Phosphorus uptake by HABs: Do you have to manage everything or just the right thing?

Virginia Sea Grant, 7/12 to 6/13, \$5,000

Bronk, D (PI) and J Spackeen (Co-PI)

How Will Marine Food Webs in the Coastal Arctic Respond to Increased Runoff Associated With Permafrost Melt?

US Fish and Wildlife Service, Arctic LCC, 6/12 to 8/12, \$33,211

Bronk, D (PI), R Sipler (Co-PI), M Frischer and J Nejstgaard (Co-PIs, SkIO), and T Sutton (Co-PI, UAlaska)

MRI: Acquisition of a flow cytometer with high-speed sorting to advance aquatic science research and education

NSF (EAR-1229252), 8/12 to 7/14, \$580,393

Bronk, D (PI), A Beck (Co-PI), and K Reece (Co-PI)

Effluent organic nitrogen produced within wastewater treatment plants

Water Environment Research Federation with in-kind support from Hampton Roads Sanitation District, 2/12 to 1/14. \$204,072 WERF + \$35,000 HRSD

Bronk, D (PI) and R Sipler (Co-PI)

Synergistic effects of iron, carbon dioxide and temperature on the fate of nitrate:

Implications for future changes in export production in the Southern Ocean

NSF: Antarctic Ocean and Atmospheric Science (ANT-1043635), 9/11 to 8/14, Bronk part \$476,668. Additional supplement of \$143,275 for total of \$619,943.

Allen, A (PI, JCVI), D Hutchin (Co-PI, USC), and **D Bronk (Co-PI)**

Determining rates of group-specific phytoplankton and bacterial uptake of inorganic and organic nitrogen by means of stable isotope probing

NSF: Biological Oceanography (OCE-0960806), 3/10 to 2/13, Bronk part \$377,744

Wawrik, B (PI, UOklahoma) and **D Bronk (Co-PI)**

Does competition for nitrogen between autotrophs and heterotrophs control carbon fluxes in the western coastal Arctic?

NSF: Office of Polar Programs (ARC-0909839), 9/09 to 8/12, Bronk part \$390,827

Yager, P (PI, UGA), M Frischer (Co-PI, SkIO) and **D Bronk (Co-PI)**

Karenia nutrient dynamics in the Eastern Gulf of Mexico

EPA: ECOHAB, 9/06 to 8/11. Bronk part \$499,823.

Heil, C (PI, FFWCC), **D Bronk (Co-PI)**, M Mulholland (Co-PI, ODU), J. O'Neil (Co-PI, UMD)

Chemical characterization of EON as it passes through a WWTP

Hampton Roads Sanitation District, 2010, \$65,000 + student internship

Sipler, R(PI) and **D Bronk (Co-PI)**

Bioavailability of effluent organic nitrogen in Virginia coastal waters

Virginia Sea Grant, 2/09 to 1/11, Bronk part \$130,000

Bronk, D (PI) and M Mulholland (ODU)

Combining flow cytometry and stable isotope techniques: A method to measure phytoplankton- and bacteria-specific nitrogen uptake

NSF: Biological Oceanography, 3/08 to 2/11, Bronk part \$232,237

Bronk, D (PI), M Lomas (Co-PI, BIOS)

C-43 Water quality treatment project – Removing available DON using engineered wetlands

Consulting for CH2MHill engineering, 3/09 to 12/09, Bronk part \$65,550

Bronk, D (PI) and A Loh (Co-PI)

Biodiesel production from algae

Funded by Virginia Coastal Energy Research Consortium (VCERC)

Bronk parts \$13,557 for 2009; \$22,937 for 2008; \$25,657 for 2007

Assessing the bioavailability of effluent organic nitrogen along a freshwater continuum
Funded by NSF: Chemical, Bioengineering, Environmental, and Transport Systems (CBET-0756475), 4/08 to 4/10, Bronk part \$194,353

Bronk, D (PI), E Canuel (Co-PI, VIMS), M Mulholland (ODU), N Love (UMichigan), and P Hatcher (ODU)

Bioavailability of effluent organic nitrogen in Virginia coastal waters

Funded by Virginia Sea Grant. 10/07 to 3/08. \$10,000

Bronk, D (PI)

Quantification and modeling of DOC and DON release in marine systems: a study of increasing trophic complexity

Funded by NSF: Biocomplexity (OCE-0221825), 9/02 to 8/07, \$1,699,000

Bronk, D (PI), WO Smith (Co-PI, VIMS), D Steinberg (Co-PI, VIMS), D Malmquist (Co-PI, VIMS), E Wommack (Co-PI, UDe), C Carlson (Co-PI, UC Santa Barbara), R Hood (Co-PI, UMD), and D Repeta (Co-PI, WHOI)

Nitrogen Preferences and Uptake Kinetics in Cultures and Field Populations of the Florida Red Tide Dinoflagellate *Karenia brevis*

Funded by Florida Fish and Wildlife Conservation Commission, 10/05 to 4/06, \$25,000

Bronk, D (PI)

The Ecology and Genomics of CO₂ Fixation in Oceanic River Plumes.

Funded by DOE, 2/03 to 1/08, Bronk part \$117,039

Paul, J (PI, USF), **D Bronk (Co-PI)**, J Corredor, J Lopez, J Morell (Co-PI, Puerto Rico), and R Tabita (Co-PI, OSU)

Molecular approaches for in situ study of nitrate utilization by marine bacteria.

Funded by DOE, 12/03 to 11/06, Bronk part \$186,160.

Frischer, M (PI, SkIO), P Verity, S Whipple (Co-PI, SkIO), **D Bronk (Co-PI)**, M Gilligan (Co-PI, SSU), M Booth (Co-PI, Roanoke)

Geochemical Rate/RNA Integration Study (GRIST): A Pilot Field Experiment for Inter-Calibration of Biogeochemical Flux and Nucleic Acid Measurements

Funded by DOE, 6/02 to 5/03, ~\$400,000

Kerkhoff, L (PI, Rutgers), **D Bronk (Co-PI)**, and others.

Fate of recently fixed nitrogen in the eastern Gulf of Mexico: Does the regeneration of nitrogen fixed by *Trichodesmium* support the growth development of *G. breve* blooms?

Funded by NSF: Biological Oceanography, 5/01 to 4/04, ~\$700,000

Heil, C (PI, USF), **D Bronk (Co-PI)**, and M Mulholland (Co-PI, ODU)

Molecular approaches for *in situ* study of nitrate utilization by marine bacteria.

Funded by DOE, 12/00 to 11/03

Frischer, M (PI, SkIO), P Verity, M Booth (Co-PI, SkIO), **D Bronk (Co-PI)**, M Gilligan (Co-PI, SSU)

Coastal eutrophication in the southeastern U.S.: Nitrogen versus phosphorus limitation and the role of organic nitrogen

Funded by Georgia Sea Grant, 3/00 to 2/02, \$133,048

Bronk, D (PI)

Coastal eutrophication: Organic versus inorganic nitrogen as a source of coastal productivity

Funded by Georgia Sea Grant, 9/98 to 8/99, \$45,995 supplement

Bronk, D (PI)

Ephemeral microbial mats in the Satilla River: Initial survey of physical and chemical characteristics

Funded by Georgia Sea Grant, 9/98 to 8/99, \$9,760

Joye, S (PI, UGA) and **D Bronk (PI)**

Molecular approaches for *in situ* study of nitrate utilization by marine bacteria.

Funded by DOE, 12/97 to 11/00, Bronk part \$170,002

Frischer, S (PI, SkIO), P Verity, M Booth (Co-PI, SkIO), **D Bronk (PI)**, M Gilligan (Co-PI, SSU)

The influence of land use on groundwater derived nutrients and organic inputs to the South Atlantic Bight

Funded by South Carolina Sea Grant, 11/97 to 10/98, Bronk part \$34,920

Joye, S (PI, UGA), **D Bronk (Co-PI)**, WJ Cai (Co-PI), W Moore (Co-PI)

Molecular approaches for *in situ* study of nitrate utilization by marine bacteria.

Funded by DOE, 10/97 to 9/00, Bronk part ~\$100,000

Hodson, R (PI, UGA), **D Bronk (Co-PI)**, MA Moran (Co-PI, UGA), and others

Analytical Instrumentation: Mass spectrometer for the analysis of carbon and nitrogen isotopic ratios

Funded by NSF: Biological Oceanography, 2/97 to 1/98, \$101,116

Bronk, D (PI)

New and regenerated production in the Southern Ocean: Ross Sea studies (U.S. JGOFS)

Funded by NSF: Office of Polar Programs, 7/96 to 6/99, Bronk part \$117,382

Cochlan, W (PI, SFSU) and **D Bronk (Co-PI)**

REU Supplement to New and regenerated production in the Southern Ocean: Ross Sea studies (U.S. JGOFS)

Funded by NSF: Office of Polar Programs, 2/97 to 1/98, \$4,000

Bronk, D (PI)

Coastal eutrophication: Organic versus inorganic nitrogen as a source of coastal productivity

Funded by Georgia Sea Grant, 9/96 to 8/98, \$87,374

Bronk, D (PI)

Inputs and fates of organic nitrogen in two land-margin ecosystems: Chesapeake Bay and Georgia coastal rivers

Funded by NSF: Biological Oceanography and Environmental Geochemistry and Biogeochemistry, 9/96 to 8/99, Bronk part \$137,819

Glibert, P (PI, UMD) and **D Bronk (Co-PI)**

Coastal eutrophication: Organic versus inorganic nitrogen as a source of coastal productivity

Funded by Georgia Sea Grant, 4/96 to 3/97, \$10,000

Bronk, D (PI)

Bacterial utilization of marsh-derived humic material as a nitrogen source in coastal waters of the Southeastern United States

Funded by Georgia Sea Grant, 4/95 to 3/96, \$10,000

Bronk, D (PI)

Dissolved organic nitrogen uptake by autotrophic plankton studied with flow cytometry

Funded by NSF, Biological, 12/95 to 6/97, \$18,000

Bronk, D (PI)

PUBLICATIONS

Refereed Publications, Chapters in Books:

(* indicates work done by a student, technician, or post-doc in my laboratory or work that was done in my laboratory)

Submitted:

*Spackeen JL, K Xu, RE Sipler, Zhi Zhu, DA Hutchins, **DA Bronk**. In revision. Uptake of carbon, nitrogen and phosphorus under a matrix of temperature and Fe by three Antarctic phytoplankton species (*Fragilariopsis cylindrus*, *Pseudonitzschia subcurvata*, and *Phaeocystis antarctica*).

*Sipler, RE, CB Bott, **DA Bronk**. Submitted. Chemical characterization of dissolved organic nitrogen present at different stages throughout the water resource recovery process. Water Research.

Published or in press:

Bronk, DA, RE Sipler, RT Letscher, and MD McCarthy. 2024. Dissolved Organic Nitrogen. In Biogeochemistry of Marine Dissolved Organic Matter. 3rd Edition. Eds. Hansell, DA and Carlson, CA.

Jabre, L, AE Allen, JSP McCain, JP McCrow, N Tenenbaum, JL Spackeen, RE Sipler, BR Green, **DA Bronk**, DA Hutchins, and EM Bertrand. 2021. Molecular underpinning and biogeochemical consequences of enhanced diatom growth in a warming Southern Ocean. Proceedings of the National Academy of Science.

*Killberg-Thoreson. SE Baer, RE Sipler, WG Reay, QN Roberts, and **DA Bronk**. 2021. Seasonal nitrogen uptake dynamics and harmful algal blooms in the York River, Virginia. Estuaries and Coasts. 44(3): 750-768. doi: 10.1007/s12237-020-00802-4

MK Rogener, RE Sipler, KS Hunter, H Choi, **DA Bronk**, SB Joye. 2020. Pelagic methane oxidation in the northern Chukchi Sea. Limnology and Oceanography. 65: 96-110. doi.org/10.1002/lno.11254

Yao, X, RE Sipler, BC Stanley, QN Roberts, MP Sanderson, CB Bott, and **DA Bronk**. 2019. Quantifying effluent dissolved organic nitrogen (EDON) uptake by microbial communities along a salinity gradient in the York River. Estuaries and Coasts. 42 (5): 1265-1280. doi.org/10.1007/s12237-019-00563-9.

Tatters, AO, A Schnetzer, K Xu, NG Walworth, F Fu, JL Spackeen, RE Sipler, EM Bertrand, JB McQuaid, AE Allen, **DA Bronk**, K Gao, J Sun, DA Caron, DA Hutchins. 2018. Interactive effects of temperature, CO₂, and nitrogen source on a coastal California plankton assemblage. Journal of Plankton Research. 40 (2): 151-164. doi.org/10.1093/plankt/fbx074.

*Spackeen JL, **DA Bronk**, RE Sipler, E Bertrand, DA Hutchins, AE Allen. 2018. Stoichiometric N:P ratios, temperature, and iron impact carbon and nitrogen uptake by Ross Sea microbial communities. Journal of Geophysical Research – Biogeosciences. doi.org/10.1029/2017JG004316.

Harding, K, K Turk-Kubo, R Sipler, M Mills, **D Bronk**, and J Zehr. 2018. Symbiotic Unicellular Cyanobacteria Fix Nitrogen in the Arctic Ocean. Proceedings of the National Academy of Science. 115: 13371-13375. doi/10.1073/pnas.1313658115.

- *Spackeen J.L., RE Sipler, EM Bertrand, K Xu, JB McQuaid, N Walworth, DA Hutchins, AE Allen, **DA Bronk**. 2018. Impact of temperature, CO₂, and iron on nutrient uptake by a late season microbial community from the Ross Sea, Antarctica. *Aquatic Microbial Ecology*. 82: 145-159. doi.org/10.3354/ame01886. (90)
- Bronk, D**, RE Sipler, C Bott. 2017. Effluent organic nitrogen produced within waste water treatment plants. Water Environment Research Foundation. ISBN: 978-1-94124-251-3
- Wawrik, B, **D Bronk**, S Baer, L Chi, M Sun, J Cooper, and Z Yang. 2017. Bacterial utilization of creatine in seawater. *Aquatic Microbial Ecology*. 80: 153-165. DOI: <https://doi.org/10.3354/ame01850>
- *Sipler, RE, D. Gong, SE Baer, MP Sanderson, QN Roberts, M Mulholland, **DA Bronk**. 2017. Contribution of Arctic nitrogen fixation to the global nitrogen budget. *Limnology and Oceanography Letters*. doi: 10.1002/lol2.10046
- *Spackeen J.L., RE Sipler, MP Sanderson, QN Roberts, K Xu, AO Tatters, N Walworth, DA Hutchins, AE Allen, **DA Bronk**. 2017. Interactive effects of temperature, CO₂, and nitrogen source on a coastal California plankton assemblage: II. Microbial uptake of nitrate, urea, and carbon. *Marine Ecology Progress Series*. 577: 49-65
- *Sipler, RE, CT Kellogg, TL Connelly, QN Roberts, PL Yager, **DA Bronk**. 2017. Microbial community response to terrestrially-derived dissolved organic matter in the coastal Arctic. *Frontiers in Microbiology*. 8:1018. doi: 10.3389/fmicb.2017.01018
- *Baer, SE, RE Sipler, QN Roberts, PL Yager, ME Frischer, and **DA Bronk**. 2017. Seasonal nitrogen uptake and regeneration in the western coastal Arctic. *For Limnology and Oceanography*. doi: 10.1002/lno.10580
- *Sipler, RE, SE Baer, TL Connelly, ME Frischer, QN Roberts, PL Yager, **DA Bronk**. 2017. Chemical and photophysiological impact of terrestrially-derived dissolved organic matter on nitrate uptake in the coastal western Arctic. *Limnology and Oceanography*. doi: 10.102/lno.10541
- Zhu, Z, K Xu, JL Spackeen, **DA Bronk**, and DA Hutchins. 2016. A comparative study of iron and temperature interactive effects on diatoms and *Phaeocystis antarctica* from the Ross Sea, Antarctica. *Marine Ecology Progress Series*. doi: 10.3354/meps11732
- Bertrand, EM, JP McCrow, A Moustafa, H Zheng, JB McQuaid, TO Delmont, AF Post, RE Sipler, JL Spackeen, K Xu, **DA Bronk**, DA Hutchins, and AE Allen. 2015. Phytoplankton-bacterial interactions mediate micronutrient colimitation at the coastal Antarctic sea ice edge. *Proceedings of the National Academy of Science*. doi: 10.1073/pnas.1501615112
- *Baer, SE, TL Connelly, and **DA Bronk**. 2015. Nitrogen uptake dynamics in landfast sea ice of the Chukchi Sea. *Polar Biology*. 38: 781-797. doi 10.1007/s00300-014-1639-y (80)
- *Baer, SE, TL Connelly, RE Sipler, PL Yager, and **DA Bronk**. 2015. Effect of temperature on rates of ammonium uptake and nitrification in the western coastal Arctic during winter, spring and summer. *Global Biogeochemical Cycles*. 28 (12): 1455-1466. doi: 10.1002/2013GB004765

- *Sipler, RE and **DA Bronk**. 2015. Dynamics of dissolved organic nitrogen. In Biogeochemistry of Marine Dissolved Organic Matter. 2nd Edition. Eds. Hansell, DA and Carlson, CA.
- *Funkey, CP, RJ Latour, and **DA Bronk**. 2015. Abiotic effects on effluent dissolved organic nitrogen along an estuarine transect. Water Environment Research. 87 (3): 258-268.
- Connolly, TL, SE Baer, JT Cooper, **DA Bronk**, and B Wawrik. 2014. Urea uptake and carbon fixation by marine pelagic bacteria and archaea during the Arctic summer and winter seasons. Applied and Environmental Microbiology. 80: 6013-6022. doi: 10.1128/AEM.01431-14
- Heil, CA, **DA Bronk**, MR Mulholland, JM O'Neil, P Bernhardt, S Murasko, JA Havens, and GA Vargo. 2014. Influence of daylight surface aggregation behavior on nutrient cycling during a *Karenia brevis* (Davis) G. Hansen & Moestrup bloom: Migration to the surface as a nutrient acquisition strategy. Harmful Algae. 38: 86-94
- Heil, CA, LK Dixon, E Hall, M Garrett, JM Lenes, JM O'Neil, BM Walsh, **DA Bronk**, L Killberg-Thoreson, GL Hitchcock, KA Meyer, MR Mulholland, L Procise, GJ Kirkpatrick, JJ Walsh, and RW Weisberg. 2014. Blooms of *Karenia brevis* (Davis) G. Hansen & Moestrup on the West Florida Shelf: Nutrient sources and potential management strategies based on a multi-year regional study. Harmful Algae. 38: 127-140.
- *Killberg-Thoreson, L, MR Mulholland, CA Heil, MP Sanderson, JM O'Neil, and **DA Bronk**.. 2014. Nitrogen uptake kinetics in field populations and cultured strains of *Karenia brevis*. Harmful Algae. 38: 73-85.
- Mulholland, MR, PW Bernhardt, I Ozmon, LA Procise, M Garrett, JO'Neil, CA Heil, and **DA Bronk**. 2014. Contributions of diazotrophy to N inputs supporting *Karenia brevis* blooms in the Gulf of Mexico. Harmful Algae. 38: 20-29.
- Heil, CA, **DA Bronk**, LK Dixon, GL Hitchcock, GJ Kirkpatrick, MR Mulholland, JM O'Neil, JJ Walsh, R Weisberg, and M Garrett. 2014. The Gulf of Mexico EOHAB: *Karenia* Program 2006-2012. Harmful Algae. 38: 3-7.
- Bronk, DA**, L Killberg-Thoreson, RE Sipler, MR Mulholland, QN Roberts, PW Bernhardt, M Garrett, JM O'Neil, and CA Heil. 2014. Nitrogen uptake and regeneration (ammonium regeneration, nitrification, and photoproduction) in waters of the West Florida Shelf prone to blooms of *Karenia brevis*. Harmful Algae. 38: 50-62. (70)
- *Killberg-Thoreson, L, RE Sipler, CA Heil, MJ Garrett, QN Roberts and **DA Bronk**. 2014. Nutrients released from decaying fish support microbial growth in the eastern Gulf of Mexico. Harmful Algae. 38: 40-49.
- *Benavides, M, **DA Bronk**, NSR Agawin, MD Pérez-Hernández, A Hernández-Guerra, and J Arístegui. 2013. Longitudinal variability of size-fractionated N₂ fixation and DON release rates along 24.5°N in the subtropical North Atlantic. Journal of Geophysical Research Oceans. 118 (4): 3406-3415. <http://dx.doi.org/10.1002/jgrc.20253>.
- *Sipler, RE, **DA Bronk**, SP Seitzinger, RJ Lauck, LR McGuinness, GJ Kirkpatrick, CA Heil, LJ Kerkhof, and OM Schofield. 2013. *Trichodemium* sp. derived dissolved organic matter is a source of nitrogen capable of supporting the growth of toxic red tide *Karenia brevis*. Marine Ecology Progress Series. 483: 31-45.

- *Killberg-Thoreson, L, RE Sipler, and **DA Bronk**. 2013. Anthropogenic nutrient sources supplied to a Chesapeake Bay tributary support algal growth: A bioassay and high-resolution mass spectrometry approach. *Estuaries and Coasts*. 36 (5): 966-980. DOI: 10.1007/s12237-013-9604-5
- Osborne, DM, DC Podgorski, **DA Bronk**, Q Roberts, RE Sipler, D Austin, JS Bays, and WT Cooper. 2013. Molecular-level characterization of reactive and refractory dissolved natural organic nitrogen compounds by atmospheric pressure photoionization coupled to Fourier transform-ion cyclotron resonance mass spectrometry. *Rapid Communications in Mass Spectrometry*. 27 (8): 851-858, DOI: 10.1002/rcm.6521.
- Mesfioui, R, NG Love, **DA Bronk**, MR Mulholland, and PG Hatcher. 2012. Reactivity and chemical characterization of effluent organic nitrogen from wastewater treatment plants determined by Fourier transform ion cyclotron resonance mass spectrometry. *Water Research*. 46 (3): 622-634.
- John, DE, JE Corredor, JM López-Díaz, A Cabrera, **DA Bronk**, N Santiago, and JH Paul. 2012. A day in the life in the dynamic marine environment: how nutrients shape diel patterns of phytoplankton photosynthesis and carbon fixation gene expression in the Mississippi and Orinoco River plumes. *Hydrobiologia*. 679:155–173.
- Wawrik, B, WB Boling, JD Van Nostrand, J Xie, J Zhou, and **DA Bronk**. 2012. Assimilatory nitrate utilization by bacteria on the West Florida Shelf as determined by stable isotope probing and functional microarray analysis. *FEMS Microbiology Ecology*. 79: 400-411.
- Voß, M, **D Bronk**, B Deutsch, R Purvaja, R Ramesh, T Rixen, R Sipler, and N Wannicke. 2011. Internal cycling of nitrogen and nitrogen transformations. In: *Treatise on Estuarine and Coastal Science*. Wolanski, E. and D.S. McLusky (eds). 5: 231-259.
- *Condon, RH, DK Steinberg, PA del Giorgio, TC Bourvier, H Ducklow, and **DA Bronk**. 2011. The ‘jelly carbon pump’: Jellyfish blooms result in a major microbial respiratory sink of carbon in marine systems. *Proceedings of the National Academy of Science*. doi:10.1073/pnas.1015782108, 108: 10225-10230. (60)
- *Saba, G, DK Steinberg, and **DA Bronk**. 2011. The relative importance of sloppy feeding, excretion, and fecal pellet leaching in the release of dissolved carbon and nitrogen by *Acartia tonsa* copepods. *Journal of Experimental Marine Biology and Ecology*. 404: 47-56.
- Love, NG, MR Mulholland, and **DA Bronk**. 2011. Nutrients and their Effect on the Environment. In: *Nutrient Removal*. WEF Manual of Practice No. 34. WEF Press. pg. 2-33.
- *Saba, G, DK Steinberg, **DA Bronk**, and AR Place. 2011. The effects of harmful algal species and food concentration on zooplankton grazer production of dissolved organic matter and inorganic nutrients. *Harmful Algae*. 10: 291-303.
- Lomas, MW, **DA Bronk**, and G van den Engh. 2011. Use of Flow Cytometry to Measure Biogeochemical Rates and Processes in the Ocean. *Annual Reviews of Marine Science*. 3: 537-566.
- Filippino, KC, MR Mulholland, PW Bernhardt, GE Boniello, RE Morse, M Semcheski, H Marshall, NG Love, Q Roberts, and **DA Bronk**. 2011. The bioavailability of effluent-derived organic nitrogen along an estuarine salinity gradient. *Estuaries and Coasts*.

34: 269-280.

- *Bradley, PB, MP Sanderson, JC Nejstgaard, AF Sazhin, ME Frischer, LM Killberg-Thoreson, PG Verity, L Campbell, and **DA Bronk**. 2010. Nitrogen uptake by phytoplankton and bacteria during an induced *Phaeocystis pouchetii* bloom, measured using size fractionation and flow cytometric sorting approaches. *Aquatic Microbial Ecology*. 61: 89-104.
- Bronk, DA**, Q Roberts, E Canuel, P Hatcher, R Mefioui, KC Filippino, MR Mulholland, and N Love. 2010. Effluent organic nitrogen (EON): Bioavailability and photochemical and salinity release. *Environmental Science and Technology*. 44: 5830-5835.
- *Bradley, PB, M Lomas, and **DA Bronk**. 2010. Inorganic and organic nitrogen use by phytoplankton along Chesapeake Bay measured using a flow cytometric approach. *Estuaries and Coasts*. 33: 971-984.
- *Bradley, PB, ME Frischer, J Brofft, MP Sanderson, MG Booth, LJ Kerkhof, and **DA Bronk**. 2010. Inorganic and organic nitrogen uptake by phytoplankton and heterotrophic bacteria in the stratified Mid-Atlantic Bight. *Estuarine, Coastal and Shelf Science*. 88: 429-441.
- *Condon, RH, DK Steinberg, **DA Bronk**. 2010. Production of dissolved organic matter and inorganic nutrients by gelatinous zooplankton in the York River estuary, Chesapeake Bay. *J. Plankton Res.* 32 (2): 153-170. (50)
- Wawrik, B, AV Callaghan, **DA Bronk**. 2009. Inorganic and organic nitrogen use by *Synechococcus* and diatoms on the West Florida Shelf measured using stable isotope probing. *Applied Environmental Microbiology*. 75: 6662-6670.
- *Saba, GK, DK Steinberg, and **DA Bronk**. 2009. Effects of diet on release of dissolved organic and inorganic nutrients by the copepod *Acartia tonsa*. *Marine Ecology Progress Series* 386:147-161.
- *Hoffman, JC, **DA Bronk**, and JE Olney. 2008. Organic Matter Sources Supporting Lower Food Web Production in the Tidal Freshwater Portion of the York River Estuary, Virginia. *Estuaries and Coasts*. 31: 898-911.
- Glibert, P. M., R Azanza, M Burford, K Furuya, E Abal, A Al-Azri, F Al-Yamani, P Anderson, J Beardall, GM Berg, L Brand, **DA Bronk**, J Brookes, JM Burkholder, A Cembella, W Cochlan, J Collier, Y Collos, R Diaz, M Doblin, T Drennen, S Dyhrman, Y Fukuyo, M Furnas, J Galloway, E Graneli, DV Ha, J Harrison, P Harrison, CA Heil, K Heimann, R Howarth, C Jauzein, AA Kana, TM Kana, H Kim, R Kudela, C Legrand, M Mallin, M Mulholland, S Murray, J O'Neil, G Pitcher, Y Qi, N Rabalais, R Raine, S Seitzinger, C Solomon, DK Stoecker, G Usup, J Wilson, K. Yin, M Zhou, and M. Zhu. 2008. Ocean urea fertilization for carbon credits poses high ecological risks. *Marine Pollution Bulletin*. 56: 1049-1056.
- *Sanderson, MP, **DA Bronk**, JC Nejstgaard, AF Sazhin, PG Verity and ME Frischer. 2008. Inorganic and organic nitrogen uptake during a *Phaeocystis* bloom in a Norwegian fjord: A mesocosm study. *Aquatic Microbial Ecology*. 51: 153-168.
- Bronk, DA** and D Steinberg. 2008. Nitrogen regeneration. In: *Nitrogen in the Marine Environment*. Capone, DG, **DA Bronk**, M Mulholland, and E Carpenter (eds). Elsevier Press. Pg. 385-468.

- McCarthy, MD and **DA Bronk**. 2008. Analytical methods for nitrogen chemical characterization and flux rates. In: Nitrogen in the Marine Environment. Capone, DG, **DA Bronk**, M Mulholland, and E Carpenter (eds). Elsevier Press. Pg. 1219-1276.
- *Hoffman, JC, KE Limburg, **DA Bronk**, and JE Olney. 2008. Overwintering habitats of migratory juvenile American shad in Chesapeake Bay. *Environmental Biology of Fishes*. 81: 329-345.
- *Hoffman, JC, **DA Bronk**, and JE Olney. 2007. Contribution of allochthonous carbon to American shad production in the Mattaponi River, Virginia using stable isotopes. *Estuaries and Coasts*. 30(6): 1034-1048.
- *Hoffman, JC, **DA Bronk**, and JE Olney. 2007. Heterogeneous use of nursery habitat identified in young American shad using stable isotopes. *Transactions of the American Fisheries Society*. 136 (5): 1285-1297. (40)
- John, DE, ZA Wang, X Liu, RH Byrne, JE Corredor, JM López, A Cabrera, **DA Bronk**, RF Tabita, and JH Paul. 2007. Carbon fixation gene (RuBisCO) transcripts and CO₂ flux in the Mississippi River plume. *International Society of Microbial Ecology Journal*. 1: 517-531.
- Hoch, MP and **DA Bronk**. 2007. Relative availability of nitrogen, phosphorus, and carbon to bacterioplankton in the Eastern Tropical North Pacific assessed by an enzymatic approach. *Journal of Environmental Marine Biology and Ecology*. 349: 390-404.
- Bronk, DA**, JH See, P Bradley, and L Killberg. 2007. DON as a source of bioavailable nitrogen for phytoplankton. *Biogeosciences*. 4: 283-296.
- Joye, SB, **DA Bronk**, DJ Koopmans, and WS Moore. 2006. Evaluating the potential importance of groundwater-derived carbon, nitrogen, and phosphorus inputs to South Carolina and Georgia coastal ecosystems. In: G.S. Keleppel, M.R. De Voe and M.V. Rawson (Editors), *Changing Land Use Patterns in the Coastal Zone*. Springer, New York, pp. 139-178.
- Mulholland, MR, PW Bernhardt, CA Heil, **DA Bronk** and JM O'Neil. 2006. Nitrogen fixation and release of fixed nitrogen in the Gulf of Mexico. *Limnology and Oceanography*. 51 (4): 1762-1776.
- Nejstgaard, JC, M. E. Fischer, PG Verity, J. T. Anderson, A. Jacobsen, M. J. Zirbel, A. Lersen, J. Martinez-Martinez, A. F. Sazhin, T. Walters, **DA Bronk**, S. J. Whipple, S. Borett, B. C. Patten, and J. D. Long. 2006. Plankton development and trophic transfer in seawater enclosures with nutrients and *Phaeocystis pouchetii* added. *Aquatic Microbial Ecology*. 321:99-121.
- *See, JH, **DA Bronk**, and A Lewitus. 2006. Uptake of *Spartina*-derived humic nitrogen by estuarine phytoplankton in nonaxenic and axenic culture. *Limnology and Oceanography*. 51 (5): 2290-2299.
- *Hoffman, JC and **DA Bronk**. 2006. Interannual variation in stable carbon and nitrogen isotope biogeochemistry of the Mattaponi River, Virginia. *Limnology and Oceanography*. 51 (54): 2319-2332.
- Wiegner, TN, SP Seitzinger, P Glibert, and **DA Bronk**. 2006. Influence of watershed land use on riverine dissolved organic matter composition and bioavailability. *Aquatic Microbial Ecology*. 43: 277-287.

- Bronk, DA** and KJ Flynn. 2006. Algal cultures as a tool to study the cycling of dissolved organic nitrogen. In: Algal Cultures, Analogues of Blooms and Applications. Ed. S. R. V Durvasula. pp. 301-341. (30)
- *See, JH and **DA Bronk**. 2005. Changes in molecular weight distributions, C:N ratios and chemical structures of estuarine humic substances with respect to season and age. Marine Chemistry. 97: 334-346.
- Bronk, DA** and BB Ward. 2005. Inorganic and organic nitrogen cycling in the Southern California Bight. Deep Sea Research I. 52: 2285-2300.
- Heil, CA, MR Mulholland, **DA Bronk**, P Bernhardt and JM O'Neil. 2004. Bacterial and size fractionated primary production within a large *Karenia brevis* bloom on the west Florida shelf. In: Steidinger, K. A., J. H. Landsberg, C. R. Tomas and GA Vargo (Eds.), Harmful Algae 2002. Florida Fish and Wildlife Conservation Commission, Florida Institute of Oceanography and Intergovernmental Oceanographic Commission of UNESCO, St. Petersburg, Florida, USA. pp. 38-40. (peer-reviewed book)
- Bronk, DA**, MP Sanderson, MR Mulholland, CA Heil and JM O'Neil. 2004. Organic and inorganic nitrogen uptake kinetics in field populations dominated by *Karenia brevis*. In: Steidinger, K. A., J. H. Landsberg, C. R. Tomas and GA Vargo (Eds.), Harmful Algae 2002. Florida Fish and Wildlife Conservation Commission, Florida Institute of Oceanography and Intergovernmental Oceanographic Commission of UNESCO, St. Petersburg, Florida, USA. pp. 80-82. (peer-reviewed book)
- Mulholland, MR, CA Heil, **DA Bronk**, JM O'Neil and P Bernhardt. 2004. Does nitrogen regeneration from the N₂ fixing cyanobacteria *Trichodesmium* spp. fuel *Karenia brevis* blooms in the Gulf of Mexico? In: Steidinger, K. A., J. H. Landsberg, C. R. Tomas and GA Vargo (Eds.), Harmful Algae 2002. Florida Fish and Wildlife Conservation Commission, Florida Institute of Oceanography and Intergovernmental Oceanographic Commission of UNESCO, St. Petersburg, Florida, USA. pp. 47-49. (peer-reviewed book)
- Mulholland, M, **DA Bronk** and DG Capone. 2004. Dinitrogen fixation and release of ammonium and dissolved organic nitrogen by *Trichodesmium* IMS101. Aquatic Microbial Ecology. 37: 85-94.
- Wawrick, B., JH Paul, **DA Bronk**, D John and M Gray. 2004. Preferential uptake of ammonium in the presence of elevated nitrate concentrations by phytoplankton in the offshore Mississippi plume. Aquatic Microbial Ecology. 35: 175-184.
- Cochlan, WP and **DA Bronk**. 2003. Effects of ammonium on nitrate utilization in the Ross Sea, Antarctica: Implications for f-ratio estimates. In: Biogeochemistry of the Ross Sea. DiTullio, G. R. and Dunbar, R. B. (eds). Antarctic Research Series. 78: 159-178.
- Berman, T and **DA Bronk**. 2003. Dissolved Organic Nitrogen: a dynamic participant in aquatic ecosystems. Aquatic Microbial Ecology. 31: 273-305.
- Allen, AE, MH Howard-Jones, MG Booth, ME Frischer, PG Verity, **DA Bronk** and MP Sanderson. 2002. Importance of heterotrophic bacterial assimilation of ammonium and nitrate in the Barents Sea during summer. Journal Marine Science. 38: 93-108. (20)

- Cochlan, WP, **DA Bronk** and KH Coale. 2002. Trace metals and nitrogenous nutrition of Antarctic phytoplankton: experimental observations in the Ross Sea. *Deep-Sea Research*. 49: 3365-3390.
- Sharp, JH and others including **DA Bronk**. 2002. A preliminary methods comparison for measurement of dissolved organic nitrogen in seawater. *Marine Chemistry*. 78: 171-184.
- Bronk, DA** 2002. Dynamics of dissolved organic nitrogen. In *Biogeochemistry of Marine Dissolved Organic Matter*. Eds. Hansell, DA and CA Carlson. pg. 153-247.
- *Koopmans, DJ and **DA Bronk**. 2002. Photochemical production of inorganic nitrogen from dissolved organic nitrogen in waters of two estuaries and adjacent surficial groundwaters. *Aquatic Microbial Ecology*. 26: 295-304.
- Lomas, MW, TM Trice, PM Glibert, **DA Bronk**, JJ McCarthy. 2002. Temporal and spatial dynamics of urea concentrations in Chesapeake Bay: Biological versus physical forcing. *Estuaries*. 25: 469-482.
- Cochlan, WP and **DA Bronk**. 2001. Nitrogen uptake kinetics in the Ross Sea, Antarctica. *Deep-Sea Research II*. 48: 4127-4153.
- Ward, BB and **DA Bronk**. 2001. Net nitrogen uptake and DON release in surface waters: importance of trophic interactions implied from size fractionation experiments. *Marine Ecology Progress Series*. 219: 11-24.
- Bronk, DA** and BB Ward. 2000. Magnitude of DON release relative to gross nitrogen uptake in marine systems. *Limnology and Oceanography*. 45: 1879-1883.
- Bronk, DA**, MW Lomas, PM Glibert, KJ Schukert and MP Sanderson. 2000. Total dissolved nitrogen analysis: comparison between the persulfate, UV and high temperature oxidation methods. *Marine Chemistry*. 69: 163-178.
- Bronk, DA** and BB Ward. 1999. Gross and net nitrogen uptake and DON release in the euphotic zone of Monterey Bay, California. *Limnology and Oceanography*. 44: 573-585. (10)
- Bronk, DA** 1999. Rates of NH_4^+ uptake, intracellular transformation and dissolved organic nitrogen release in two clones of marine *Synechococcus* spp. *Journal Plankton Research*. 21: 1337-1353.
- Bronk, DA**, PM Glibert, TC Malone, E Sahlsten and S Banahan. 1998. Inorganic and organic nitrogen cycling in Chesapeake Bay: autotrophic versus heterotrophic processes and relationships to carbon flux. *Aquatic Microbial Ecology*. 15: 177-189.
- Bushaw, KL, RG Zepp, MA Tarr, D Schulz-Jander, RA Bourbonniere, RE Hodson, WL Miller, **DA Bronk** and MA Moran. 1996. Photochemical release of biologically labile nitrogen from dissolved organic matter. *Nature*. 381: 404-407.
- Bronk, DA** and PM Glibert. 1994. The fate of the missing ^{15}N differs among marine systems. *Limnology and Oceanography*. 39: 189-194.
- Bronk, DA**, PM Glibert and BB Ward. 1994. Nitrogen uptake, dissolved organic nitrogen release and new production. *Science*. 265: 1843-1846. *Awarded the Lindeman Award by the American Society of Limnology and Oceanography for the "outstanding paper in aquatic sciences by a young scientist"*

- Glibert, PM and **DA Bronk**. 1994. Release of dissolved organic nitrogen by marine diazotrophic cyanobacteria, *Trichodesmium* spp. *Applied Environmental Microbiology*. 60: 3996-4000.
- Bronk, DA** and PM Glibert. 1993. Application of a ^{15}N tracer method to the study of dissolved organic nitrogen uptake during spring and summer in Chesapeake Bay. *Marine Biology*. 115: 501-508.
- Bronk, DA** and PM Glibert. 1993. Contrasting patterns of dissolved organic nitrogen release by two size fractions of estuarine plankton during a period of rapid NH_4^+ consumption and NO_2^- production. *Marine Ecology Progress Series*. 96: 291-299.
- Bronk, DA** and PM Glibert. 1991. A ^{15}N tracer method for the measurement of dissolved organic nitrogen release by phytoplankton. *Marine Ecology Progress Series*. 77: 171-182.

Edited books and journals

- Taylor, P, K Tedesco, and **DA Bronk** (eds). 2010. *Oceanography Magazine: Celebrating 50 years of the Intergovernmental Oceanographic Commission*. Volume 23.
- Capone, DG, **DA Bronk**, M Mulholland and E Carpenter (eds). 2008. *Nitrogen in the Marine Environment*. Elsevier Press. Amsterdam. pp. 1729.

Congressional Testimony

- Hearing on Climate change and the ocean, House Natural Resources Committee, Subcommittee on Water, Oceans, and Wildlife, February 7, 2019
- Hearing on Atmospheric science research and forecasting innovation, Senate Committee on Commerce, Science and Transportation, Subcommittee on Science, Oceans, Fisheries and Weather, May 16, 2019

Invited Papers and Talks (excluding advancement presentations and Bigelow functions)

- 2024 Eggs and Issues, Portland, ME
- 2020 Coffee and Conversation: Oceanography On a Changing Planet
<https://www.facebook.com/collegeoftheatlantic/videos/606589160045101/>
 Dock & Dine (end of the episode)
<https://www.youtube.com/watch?v=FZ1N7MD86u4>
 Nitrogen cycling in the warming coastal Arctic. University of New England, Biddeford, ME
 The health of the world's oceans, Mid-Coast Forum on Foreign Relations, Camden, ME
 Research in the Arctic, Coastal Senior College, Damariscotta, ME
- 2019 The ocean as a tool to combat climate change, Women in Science and Engineering speaker series, Museum of Science, Boston, MA

- MCE Life Sciences Summit, University of New England, Portland, ME
- Climate change and the ocean, Pot and Kettle Club, Mount Desert Island, ME
- My life and an oceanographer and how a trip to Maine can change everything, Boothbay Yacht Club, Boothbay Harbor, ME
- 2018 Empowering scientists to harness the oceans potential. TEDxDirigo, Portland, ME
- Nitrogen cycling in the warming coastal Arctic. University of Maine, Orono, ME
- Water colors: Changes in the Arctic and the Gulf of Maine, Frontier Café, Portland, ME
- And the waters darkened: How climate change on land alters the Arctic Sea and Gulf of Maine, Music Hall Loft, Portsmouth, NH
- And the waters darkened: How climate change on land alters the Arctic Sea and Gulf of Maine, Squirrel Island Library
- And the waters darkened: How climate change on land alters the Arctic Sea and Gulf of Maine, Isleboro Community Forum, Isleboro, ME
- 2017 **Bronk, DA**, R Sipler, J Spackeen. 2017. The potential of DON to serve as a controlling variable for inorganic nutrient concentrations in coastal and estuarine systems. Invited talk at the ASLO Aquatic Sciences meeting, Honolulu, HI.
- 2016 Nitrogen cycling in the coastal Arctic. Bigelow Laboratory for Ocean Sciences. June 2016
- Theme 2 Plenary: How does the lack of geochemical knowledge limit our understanding in other fields of oceanography: which are the most critical areas. Chemical Oceanography Meeting: A Bottom-Up Approach to Research Directions (COME ABOARD), Honolulu, HI
- Ocean Science at NSF: Info and Advice, Florida State University, November 2016
- 2015 Discussant for Marine Ecosystems in Hot Water: Some Like It Hot (But Some Do Not), AAAS, San Jose, CA, February 2015
- Panelist, Decadal Survey of Ocean Sciences, Ocean Studies Board, Washington, DC. March 2015
- Competition between phytoplankton and bacteria for nitrogen in the coastal Arctic. Virginia Tech, Blacksburg, VA, April 2015
- Nitrogen cycling in the coastal Arctic. University of Southern California, Los Angeles, CA, April 2015
- Ocean Science at NSF: Info and Advice. Scripps Institute of Oceanography, La Jolla, CA, May 2015
- Nitrogen biogeochemistry in the coastal Chukchi Sea. Scripps Institute of Oceanography, La Jolla, CA, May 2015

- Ocean Science at NSF: Info and Advice, Keynote at VIMS Post-doc symposium, May 2015
- Nitrogen fixation in a changing Arctic. Hampton University, Hampton, VA, October 2015
- 2014 Basic and applied research into nitrogen cycling. VIMS Industry Partnership meeting, Gloucester Point, VA.
- An Evolving Coupled North Atlantic/Arctic Initiative. Presented at the CCSSG/CCIWG meeting. Clarendon, VA.
- OCE Current Status and Challenges, Consortium for Ocean Leadership, Washington, DC.
- 2013 Why it rocks to be a female scientist! Presented at the Women in Scientific Education (WISE) annual retreat. Gloucester Point, VA.
- How to give an elevator speech. UMCES Graduate Student Symposium, Horn Point Laboratory, Cambridge, MD.
- Competition between phytoplankton and bacteria for nitrogen in the Arctic Ocean. Talk presented at the Crary Lab, McMurdo Station, Antarctica.
- A Washington Perspective, VIMS Council.
- 2012 NSF – A view from the inside. Physical Sciences Departmental Seminar, VIMS.
- The problem of effluent organic nitrogen. Physical Sciences Departmental Seminar, VIMS.
- Research in the Arctic. Talk presented to VIMS donors.
- Bronk, DA**, R Sipler, S Baer, Q Roberts, T Connelly, K. Sines, Z. Tait, M Frischer, and P Yager. 2012. Competition between phytoplankton and bacteria for nitrogen in the coastal Chukchi Sea. ASLO meeting, Lake Biwa, Japan.
- Nitrogen cycling in the Arctic: shifting paradigms in a time of change. Microbial Oceanography: Genomes to Biomes, University of Hawaii, Manoa, Honolulu, HI.
- How science is done in America. Talk presented at the Saturday Science talks in Barrow, Alaska.
- Challenges in Ocean Science: A view from many angles. Talk presented at the National Science Foundation.
- 2011 The problem of effluent organic nitrogen, invited talk in Science Serving Coastal Communities: Research Translated to Management Actions, CERF meeting, Daytona, FL (November 2011).
- DON bioavailability – Breaking open black boxes. Old Dominion University.
- Contribution of organic nitrogen to eutrophication, 8th Baltic Sea Conference, St. Petersburg, Russia.

- Nitrogen use in aquatic systems, Stony Brook University, Stony Brook, NY.
- ASLO's Future – Opportunities and Challenges, San Juan, Puerto Rico.
- 2010 Bioavailability of DON in aquatic systems, University of Maine, Orono, ME.
- Ocean Acidification, Barrow, AK
- Ocean Acidification: What it means for Virginia, Environment Virginia Conference, Lexington, VA
- Ocean Acidification, Naro Theater, Norfolk, VA
- 2009 Learning to do the splits - straddling systems, disciplines, and the applied versus basic divide, guest speaker at the Women in Science breakfast, Coastal Estuarine Research Federation meeting, Portland, OR
- Role of DON in the Open and Coastal Ocean, University of North Carolina, Morehead City, NC
- Role of DON in the Open and Coastal Ocean, Princeton University, Princeton, NJ
- US OCB Interests and Needs, Observing Biogeochemical Cycles at Global Scales with Profiling Floats and Gliders Workshop, Monterey, CA.
- The Need for Sustained Ocean Observations, U.S. Carbon Cycle Scientific Steering Group meeting, Reston, VA.
- Bioavailability of dissolved organic nitrogen, Microbial Oceanography: Genomes to Biomes, University of Hawaii, Manoa, Honolulu, HI.
- 2008 U.S. OCB Interests and Needs, Changing Times Workshop at Scripps Institute of Oceanography, LaJolla, CA
- Bioavailability of dissolved organic nitrogen, Microbial Oceanography: Genomes to Biomes, University of Hawaii, Honolulu, HI
- The emerging role of DON in open ocean and coastal systems in a changing world, Lamont Doherty Earth Observatory, Columbia University, Palisades, NY
- Stuff I think you might find interesting, DOM Workshop on Florida Bay, Miami, FL
- 2007 Transformations of DON in marine and aquatic systems. Establishing a Research Agenda for Assessing the Bioavailability of Wastewater-Derived Organic Nitrogen in Treatment Systems and Receiving Waters, Annapolis, MD
- The Marine Nitrogen Cycle: Who is doing what? OCB workshop, Woods Hole, MA
- DON as a source of bioavailable N for phytoplankton, Rutgers University, Rutgers, NJ
- DON as a source of bioavailable N for phytoplankton, Arizona State University, Tempe, AZ
- 2006 DON as a source of bioavailable N for phytoplankton, University of Wisconsin, Milwaukee, WI

- 2005 How to be a successful marine scientist: Advice from the trenches, Graduate student symposium at the ASLO meeting in Santiago de Campostella, Spain.
Dissolved organic nitrogen as a source of bioavailable nitrogen for phytoplankton, SPOT-ON Workshop, Warnemunde Germany
- 2004 New Directions in Environmental Science, University of Maryland, Horn Point Laboratory
DREAMS (minority program) seminar: Harmful Algal Blooms in the Gulf of Mexico, Hampton University, Hampton, VA
- 2003 Quantifying the link between nitrogen fixation and harmful algal blooms in the Gulf of Mexico: Kinetics, Seminar at Texas A&M
- 2002 Quantifying the link between nitrogen fixation and harmful algal blooms in the Gulf of Mexico, College of Marine Studies, University of Delaware, Lewes, DE
- 2000 Uptake and regeneration and photochemical processes involving dissolved organic nitrogen in an open ocean, coastal and two riverine ecosystems. Department of Oceanography, Old Dominion University, Norfolk, VA
Bronk, DA, MP Sanderson, DJ Koopmans, and JH See. Sources and sinks of dissolved organic nitrogen in the rivers and coastal ocean of the Southeastern United States, AGU/ASLO meeting, San Antonio, TX
- 1999 Bioavailability of dissolved organic nitrogen, Horn Point Laboratory, Cambridge, MD
- 1998 Dissolved organic nitrogen: a dynamic component of marine nitrogen cycles and a contributor to coastal eutrophication, Savannah River Ecology Laboratory, Aiken, SC
Dissolved organic nitrogen: a dynamic component of marine nitrogen cycles and a contributor to coastal eutrophication, Louisiana Marine Consortium, Chauvin, LA
Dissolved organic nitrogen: a dynamic component of marine nitrogen cycles and a contributor to coastal eutrophication, Virginia Institute of Marine Science, Gloucester Point, VA
- 1997 The emerging role of dissolved organic nitrogen in marine systems, Department of Oceanography, Florida State University, Tallahassee, FL
- 1996 The emerging role of dissolved organic nitrogen in marine systems, Institute of Ecosystem Studies, Millbrook, NY
- 1995 Dissolved organic nitrogen cycling in marine systems, Skidaway Institute of Oceanography, Savannah, GA
Dissolved organic nitrogen cycling in California coastal waters, Marine Science Program, University of California, Santa Cruz, CA

The role of dissolved organic nitrogen in marine systems, Department of Oceanography, Texas A&M University, College Station, TX

- 1994 Dissolved organic nitrogen release and the underestimation of new production in the ocean. The Department of Ecology, The University of Georgia, Athens, GA

The role of dissolved organic nitrogen in marine systems, Environmental Protection Agency, Athens, GA

Dissolved organic nitrogen release and the underestimation of new production in the ocean, Department of Earth and Atmospheric Science, Georgia Institute of Technology, Atlanta, GA

- 1993 Microbially mediated transformations involving dissolved organic nitrogen in marine systems, Department of Oceanography, University of British Columbia, Vancouver, British Columbia, Canada

Microbially mediated transformations involving dissolved organic nitrogen in marine systems, Department of Oceanography, University of Washington, Seattle, WA

Microbially mediated transformations involving dissolved organic nitrogen in marine systems, Dissertations Symposium on Chemical Oceanography (DISCO), Honolulu, HI

Contributed Scholarly Papers and Talks

Over 180 talks and posters at scientific meetings. List available upon request

Unrefereed Publications

Bronk, DA. 2021. To lead in science, we must reform immigration. Portland Press Herald, Maine. November 7, 2021.

Fassbender, AJ, HI Palevsky, TR Martz, AE Ingalls, M Gledhill, SE Fawcett, JA Brandes, LI Aluwihare, the participants of COME ABOARD and DISCO XXV. 2017. Perspectives on chemical oceanography in the 21st century: Participants of the COME ABOARD meeting examine aspects of the field in the context of the 40 years of DISCO. Marine Chemistry.

Conover, D and **DA Bronk.** 2015. A Transformational Path Forward for the Ocean Sciences community. EOS.

Bronk, DA. 2015. Invited autobiographical sketch. Oceanography. 27 (4): 71.

Nikolaus, R and **DA Bronk.** 2015. Ocean Research and Facilities: Transforming the Frontier of Knowledge. Sea Technology. January

Bronk, D. 2012. Message from the President, ASLO Bulletin. 21 (2): 52-53.

Bronk, D. 2012. Message from the President, ASLO Bulletin. 21 (1): 6-7.

Bronk, D. 2011. Message from the President, ASLO Bulletin. 20 (4): 76-77.

Bronk, D. 2011. Message from the President, ASLO Bulletin. 20 (3): 59-60.

Bronk, D. 2011. Message from the President, ASLO Bulletin. 20 (2): 42-43.

- Bronk, D.** 2011. Message from the President: News from Puerto Rico, ASLO Bulletin. 20 (1): 3-4.
- Bronk, D.** 2010. Message from the President: Fundraising and Endowment Campaign, ASLO Bulletin. 19 (4): 84-55.
- Bronk, D.** 2010. Message from the President: A name change for ASLO? ASLO Bulletin, 19 (3): 64-65.
- Bronk, D, P Taylor, and K Tedesco.** 2010. IOC helping to lead and support the evolution of international ocean science. *Oceanography*. 23: 16-17.
- Bronk, DA, MR Mulholland, NG Love, Q Roberts, KC Filippino, and E Canuel.** 2009. Assessing the Bioavailability of Effluent Organic Nitrogen (EON) Using a Suite of Water Quality-Based Assays. Proceedings from the Nutrient Removal 2009 WEF meeting in Washington, D. C.
- Mulholland MR, NG Love, **DA Bronk**, VM Pattarkine, A Pramanik, and HD Stensel. 2009 Establishing a Research Agenda for Assessing the Bioavailability of Wastewater Treatment Plant-Derived Effluent Organic Nitrogen in Treatment Systems and Receiving Waters. WERF, STAC Publication.
- Bronk, DA, S Henderson, Q Roberts, L Killberg, M Mulholland, and NG Love** 2007. Photochemical release of labile nitrogen from natural and effluent organic nitrogen. Proceedings of the Virginia and West Virginia Water Resources Symposium. Blacksburg, VA.
- Mulholland M, NG Love, VM Pattarkine, **DA Bronk**, and E Canuel. 2007. Bioavailability of organic nitrogen from treated wastewater. STAC Publication 07-001.
- Bronk, DA.** Invited autobiographical sketch. *The Oceanography Magazine*. March 2005.
- Bronk, DA, BR Wheeler and WP Cochlan.** 2005. Effects of iron addition on nutrient depletion and nitrogen uptake rates in an offshore region of the Ross Sea. *Antarctic Journal of the United States*. 33: 59-62.
- Cochlan, WP, J Herndon and **DA Bronk**. 2005. AESOPS: Ammonium Uptake Kinetics in the Ross Sea, Antarctica. *Antarctic Journal of the United States*. 33: 63-68.
- Bronk, DA.** 2003. Invited citation for "Carlson Receives Ocean Sciences Early Career Award". *EOS*. 84 (11): 101.
- Kerkhof, L, J Corredor, J Lopez, J Paul, **D Bronk** and J Cherrier. 2003. Experiment explores inter-calibration of biogeochemical flux and nucleic acid measurements. *EOS*. 84: 167.
- Bronk, DA and P Yager.** 2000. Research at the Extremes. UGA Research Reporter.
- Joye, SB, **DA Bronk**, WJ Cai and WS Moore. 1998. The influence of land use on groundwater derived nutrients and organic inputs to the South Atlantic Bight. NOAA Sea Grant, Technical Report, 38 pages.
- Revised three chapters of Grolier's Encyclopedia 1996 Edition.
 (original by Walter Munk) Waves
 (original by Bart J. Bok) Tides
 (original by Bart J. Bok) Currents
- Bronk, DA .** 1992. Microbially mediated transformations of dissolved organic nitrogen. Ph. D. Dissertation. University of Maryland.

Reviews of Books, etc.

Bronk, DA. 2003. Invited book review of “*Aquatic Ecosystems: Interactivity of Dissolved Organic Matter*” Findlay, S. and R. Sinsabaugh (eds.). ASLO Bulletin. 12 (2): 38-39.

Research Cruise and Field Work Experience – Over 50 research expeditions, with over 680 days at sea or at research stations including

Delaware River Plume/Atlantic, *RV Hugh Sharp*
Arctic Ocean, *RV Sikuliaq*
Coastal Alaska, *RV Ukpik*
McMurdo Station, Antarctica
Gulf of Mexico, *RV Pelican*, *RV Walton Smith*, *RV Suncoaster*
Chesapeake Bay, *RV Hugh Shar*, *RV Cape Henlopen*, *RV Wrigley Warfield*
Santa Barbara Channel, *RV Point Sur*
Bergen, Norway
Altamaha and Satilla Rivers in Georgia, *RV Savannah*, *RV Blue Fin*
Central North Pacific, *RV Melville*
South Atlantic Bight (BIOMP), *RV Cape Hatteras*
Altamaha, Ogeechee and Savannah Rivers in Georgia, *RV Blue Fin*
South Pacific, *RV Revelle*
Eastern Tropical North Pacific, *RV New Horizon*
Southern California Bight, *RV Sproul*
Monterey Bay, *RV Point Sur*
Caribbean, *RV Columbus Iselin*

Additional Training - Executive Management and Communications

2023 – Center for Creative Leadership
2013-2017 – Executive Coaching
2012 – Merit Review Basic Training
2012 – Senior Executive Service Training
2013-2015 – Executive coaching
2013 – COMPASS science communication training
2016 – William and Mary leadership program

Membership in Professional Societies

American Association of University Women (AAUW)
Association for the Sciences of Limnology and Oceanography (ASLO) *Lifetime Member*
Coastal and Estuarine Research Federation (CERF)
Council of Scientific Society Presidents (CSSP)
The Oceanography Society (TOS)
American Geophysical Union (AGU)
Women’s Aquatic Network (WAN)

Editorial Board Services, Review Panels, etc.

Service as an external reviewer

- 2024 Member, review committee for Rice River Center, Virginia Commonwealth University, Richmond, VA
- 2023 Member, review committee of Charney School of Marine Science, Haifa, Israel
- 2022 Member, Science and Technology Advisory Board for AQUACOSM Plus, a large European mesocosm program
- 2019 Chair, review committee, Ecology, Evolution and Marine Biology Program, University of California, Santa Barbara, CA
- 2017 Member, AAAS review committee of Maine EPSCoR's Track-1 SEANET project
- 2017 Member, review committee, Environmental Science Program, University of Virginia
- 2015 Chair, Institutional review committee of the Woods Hole Oceanographic Institution
- 2015 Member, AAAS review committee of Maine EPSCoR's Track-1 SEANET project

As of 2024, external reviewer of over 50 promotion packages for universities around the world

Service as a panelist

- NSF Long Term Ecological Research (2016)
- Gordon and Betty Moore Foundation (2012)
- EPA Nutrient Criteria (2010-2011)
- EPA STAR – Global Change (2010)
- EPA STAR – Water Quality (2010)
- NASA – OBB13 (2013)
- NSF Antarctic Oceans & Atmospheric Sciences (2008)
- NSF Biocomplexity in the Environment – Coupled Biogeochemical Cycles (2003)
- NSF Chemical Oceanography (2002)
- NSF Environmental Geochemistry and Biogeochemistry (1995)
- NSF Research Coordination Networks (RCN, 2004)
- NSF Site Review, chair (2012)
- NOAA Ecology of Harmful Blooms (ECOHAB; 2004, 2008)
- NOAA Sea Grant (2007)

Review service to funding agencies

- American Chemical Society Petroleum Research Board
- Australia's Marine National Facility
- Chilean Research Council
- Environmental Protection Agency
- Gordon Research Conference
- NASA
- National Environmental Research Council
- National Estuarine Research Reserves (multiple)

National Underwater Research Council (NURC/UNCW)
North Pacific Research Board
NSF Arctic Natural Sciences
NSF Antarctic Oceans & Atmospheric Sciences
NSF Biocomplexity
NSF Biological Oceanography
NSF CBET
NSF Chemical Oceanography
NSF Ecosystem Sciences
NSF Environmental Geochemistry and Biogeochemistry
NSF Research Coordination Networks
NOAA ECOHAB
NOAA GOMEX
NOAA Sea Grant (California, Delaware, Georgia, Massachusetts, Minnesota, Mississippi,
New Jersey, New York, North Carolina, South Carolina, Texas, Wisconsin)
Schmidt Ocean Institute
US-Israel Binational Research Foundation
Water Resources Research Council
Water Resources Research Institute

Review and Editorial Service to Journals

Acta Oecologica
Aquatic Biology
Aquatic Microbial Ecology (review editor 2006-present)
Biogeochemistry
Biogeosciences
Coastal Estuarine and Shelf Science
Continental Shelf Research
Critical Reviews in Environmental Science and Technology
Deep Sea Research I and II
Ecology
Environmental Management
Environmental Microbiology
Environmental Pollution
Environmental Science and Technology
Estuaries
Estuaries and Coasts
Estuarine Coastal and Shelf Science
European Nutrient Assessment
Frontiers
Geochim Cosmochim Acta
Geophysical Research Letters
Global Biogeochemical Cycles
Global Change Biology

Harmful Algae
 Hydrobiologia
 ICES Journal of Marine Science
 Indicators for the National Climate Assessment
 International Journal of Oceanography
 Journal of Air and Waste Management Association
 Journal of Experimental Marine Biology and Ecology
 Journal of Geophysical Research – Ocean
 Journal of Marine Science and Engineering
 Journal of Marine Research
 Journal of Marine Systems
 Journal of Phycology
 Journal of Plankton Research
 Limnology and Oceanography
 Limnology and Oceanography Fluids and Environments
 Limnology and Oceanography Methods
 Marine Biology
 Marine Chemistry
 Marine Ecology Progress Series
 mBIO
 Microbial Ecology
 Nature
 New Phytologist
 Oceanography Magazine
 Ophelia
 Proceedings of the Royal Society of London B – Biological Sciences
 Science
 Science of the Total Environment
 Water Research
 Water Resources
 US Global Change Research Program, National Climate Assessment – Ocean and Coastal
 Indicators Report (pp 270)

Service to Professional Societies (available upon request)

Service to State Agencies

2024-present Member, Maine Bioscience Advisory Team
 2023-present Instigator, Marine Marine Science Consortium and the Maine Ocean
 Leadership Team
 2023-present Member, Maine Space Corporation Board
 2022-present Member, Maine Innovation Economic Advisory Board
 2018-present Member, Maine Sea Grant Program's Policy Advisory Committee
 2007 Member, planning committee for Effluent Organic Nitrogen workshop,
 Annapolis, MD, September 2007

2006-2008	Scientific advisor to the Chesapeake Bay's Scientific and Technical Advisory Committee on DON bioavailability in wastewater
1998-1999	Member of the Nutrient Management and Monitoring Sub-Committee evaluating the effect of concentrated animal feeding operations. Georgia Department of Natural Resources, the Georgia Environmental Protection Division

Regional, National or International Management Commissions or Programs (select examples, full list available upon request)

2022	Member, External Advisory Committee for the Leon H. Charney School of Marine Sciences, University of Haifa, Haifa, Israel
2021-2026	President, The Oceanography Society (TOS), Elected to serve two years as President-elect, two years as President, and two years as Past-President
2021-2026	Chair, University-National Ocean Laboratory System (UNOLS) Council Elected to serve two years as chair-elect, two years as chair, and two years as immediate-past-chair
2020-present	Member, U.S. Global Leadership Coalition's Maine Advisory Committee
2016-2017	VIMS representative, Consortium of Ocean Leadership
2013-2015	Co-chair, Subcommittee on Ocean Science and Technology
2014	Steering committee, Critical Opportunities for Advanced Shipboard Oceanography in 2017, Schmidt Ocean Institute, Kahuku, HI
2012-2014	Co-chair, Ecosystem-Based Management subcommittee of the National Ocean Council
2011-2012	Centers for Ocean Sciences Education Excellence (COSEE Ocean), Advisory Board
2010-2012	Member, Ocean Time-Series Advisory Committee, NSF, NOAA, NASA
2010-2011	Member, EPA Science Advisory Board, Nutrient Criteria Review Panel
2009-2012	Member, U.S. National Committee for the Intergovernmental Oceanographic Commission (IOC)
2008-2010	Member, U. S. Carbon Cycle Science Plan Working Group
2007-2009	Chair, Ocean Time-Series Advisory Committee, NSF, NOAA, NASA
2007, 2011	Invited co-chair, The Cutting Edge: Early Career Geoscience Faculty Workshop Program – Setting up your lab and obtaining equipment. The College of William & Mary.
2006-2009	Member, Ocean Carbon and Biogeochemistry (OCB) Scientific Steering Committee (SSC) assembled by NSF, NOAA, and NASA to set priorities and develop programs for the study of ocean biogeochemistry and carbon cycling.
2006	Invited workshop participant, State of the Research on Red Tide in the Gulf of Mexico workshop, Mote Marine Laboratory in Sarasota, FL
2006	Invited participant, Ocean Carbon and Climate Change workshop, Woods Hole, MA

- 2005 Invited participant and invited speaker, Significant Processes, Observations, and Transformations in Ocean Nitrogen (SPOT-ON), Warnemunde, Germany
- 2000 Invited member, Ocean Carbon Transport, Exchanges and Transformations (OCTET) planning committee. OCTET was a group endorsed by NSF, NOAA and NASA to facilitate the articulation and pursuit of key issues in carbon research over the next decade