

CURRICULUM VITAE

BENJAMIN A. S. VAN MOOY

Associate Scientist

Woods Hole Oceanographic Institution

Department of Marine Chemistry and Geochemistry

Woods Hole, Massachusetts 02543

Telephone: 508-289-2322

Fax: 508-457-2164

Email: bvanmooy@whoi.edu

Web: www.whoi.edu/people/bvanmooy

EDUCATION:

B.A.: June, 1995. Chemistry and Geological Sciences (Honors). Northwestern University.
Advisors: David Hollander and Brad Sageman

Thesis: *Skeletal limestones of the Cretaceous Western Interior Seaway.*

M.S.: June, 2000. Chemical Oceanography. University of Washington.

Advisor: Richard G. Keil.

Thesis: *Impact of suboxia on the degradation of amino acids in sinking POC.*

Ph.D.: December, 2003. Chemical Oceanography. University of Washington.

Advisor: Allan H. Devol.

Thesis: *Carbon and phosphorus cycling by phylogenetically defined groups of bacteria in the North Pacific Ocean.*

PROFESSIONAL EXPERIENCE:

Associate Scientist, Woods Hole Ocean. Inst., Dept. Mar. Chem. & Geochem, 2008-present.

Visiting Professor, Southampton University, 2012 – present.

Assistant Scientist, Woods Hole Ocean. Inst., Dept. Mar. Chem. & Geochem, 2004-2008.

Postdoctoral Scholar, Woods Hole Ocean. Inst., Dept. Mar. Chem. & Geochem, 2004.

Research Assistant, University of Washington, School of Oceanography, 1998 – 2003.

Research Technician, Northwestern University, Dept. of Geological Sciences, 1996-1998.

REU Scholar, Carnegie Institution of Washington, Geophysical Laboratory, 1995.

Laboratory Assistant, Northwestern University, Dept. of Geological Sciences, 1993-1995.

AWARDS AND RECOGNITION:

Kavli Frontiers of Science Fellow, Kavli Foundation, 2013

Diamond Jubilee International Visiting Fellowship, Southampton University, 2013.

Faculty of 1000, Biology. Exceptional Paper. Critical recognition of Vardi et al., (2009) paper in *Science*. 2010.

Faculty of 1000, Biology. Must Read Paper. Critical recognition of Van Mooy et al., (2009) paper in *Nature*. 2009.

Faculty of 1000, Biology. Must Read Paper. Critical recognition of Van Mooy et al., (2006) paper in *Proceeding of the National Academy of Sciences*. 2006.

Faculty of 1000, Biology. Recommended Paper. Critical recognition of Van Mooy et al., (2004) paper in *Environmental Microbiology*. 2005.

Postdoctoral Award at Woods Hole Oceanographic Institution. Supported postdoctoral position.
Advisors: D. Repeta and K. Edwards, 2003.

National Estuarine Research Reserve Graduate Assistantship (NOAA). Funding for research of organic matter cycling in the sediments of Padilla Bay, Washington, 2000.

NSF Graduate Research Award. Honorable mention for proposal to study organic matter cycling on continental margins, 1998.

Egvedt Scholarship. Awarded to incoming graduate student at the School of Oceanography of high academic potential, 1998.

NSF REU Scholarship. Supported summer research at the Geophysical Laboratory, Carnegie Institution of Washington, 1998.

Schlanger Undergraduate Earth Sciences Award. Recognizes superior scholarship in the Department of Geological Sciences, Northwestern University, 1995.

Charles Hurd Scholarship for undergraduate research. Competitive grant for undergraduate research at Northwestern University, 1993.

PROFESSIONAL AFFILIATIONS:

Member, American Oil Chemists Society, 2009-present

Member, American Geophysical Union, 1997-present

Member, American Society for Limnology and Oceanography, 1997-present

RESEARCH INTERESTS:

Microbial phosphorus and organic carbon cycling in marine and aquatic environments.

Membrane glycerolipids and sphingolipids in plankton, sediments, and marine biofilms.

Algal biofuels.

Cell-cell signaling in marine biofilms and particles.

Microbial petroleum degradation.

PROFESSIONAL ACTIVITIES:

WHOI (Non Education Related)

Search Committee for Marine Chemistry and Geochemistry Assistant Scientist. 2010-2011.

Search Committee for Marine Chemistry and Geochemistry Assistant Scientist. 2006-2007.

Search Committee for WHOI Vice President for Academic Programs and Dean. 2004-2005.

Radiation Safety Committee. 2007-present

FT-MS Facility Advisory Committee. 2008 - present.

Office of Applied Oceanography Advisory Committee. 2009 - present.

Development Office "Useful Chemicals" Working Group. 2008 - present.

WHOI Board of Trustees meeting (2010 and 2011).

Access to the Sea Review Panel (2010)

MC&G Seminar Organizer (2009)

Outside WHOI

Associate Editor – *Frontiers in Aquatic Microbiology*

Associate Editor – *Geochimica et Cosmochimica Acta*.

Panelist: NSF EFRI Multicellular and Inter-Kingdom Signaling Review Panel. 2011.

Panelist: DoD Defense University Research Instrumentation Program. 2009.

Panelist: NSF Chemical Oceanography Review Panel. 2009.

Panelist: NSF Chemical Oceanography Review Panel. 2007.

Proposal Reviewer: NSF Chemical Oceanography, NSF Biological Oceanography, NSF OTIC, NSF Molecular Cell Biology, NSF Engineering, DoD DURIP, ACS Petroleum Research Fund, Institut français de la Biodiversité, NERC, US-Israel Binational Science Foundation.

Participant NASA/NSF Alternative Chemistries Workshop, 2012

Participant SOST DWH Workshop, 2011

Participant. OCB Scoping Workshop. A biogeochemical flux program aligned with OOI. 2011.

Steering Committee. OCB Scoping Workshop. The molecular biology of biogeochemistry. 2010.

Planning Committee. IMBER IMBIZO Meeting. 2010.

Invited Investigator. Centre d'Océanologie de Marseille. 2006

Invited Investigator. Photosynthesis Laboratory, Czech Academy of Sciences, 2005.

Invited Attendee. Dark energy: the deep oceanic biosphere. Woods Hole Oceanographic Institution. Woods Hole, Massachusetts, 2004.

Session co-Convener. Biogeochemistry of P-limited marine environments. *Ocean Sciences Meeting*. Portland, OR, 2006.

Session co-Convener. Biogeochemistry of planktonic phosphorus cycling: Genes to geochemical cycles. *Ocean Sciences Meeting*. Honolulu, Hawaii, 2006.

Session Leader. Upper ocean plankton dynamics. *Ocean Sciences Meeting*. Portland, Oregon, 2004.

BIOSOPE PI Meeting. Observatoire Océanologique de Villefranche, Villefranche-sur-mer, France. 2005

Journal Reviewer. *Applied and Environmental Microbiology, Aquatic Biology, Aquatic Microbial Ecology, Deep-Sea Research I & II, Environmental Microbiology, Geochimica et Cosmochimica Acta, ISME Journal, Limnology and Oceanography, Limnology and Oceanography Methods, Marine Ecology Progress Series, Nature Geoscience, Organic Geochemistry, Science*.

PARTICIPATION IN EDUCATION:

Teaching

Instructor, MIT 12.742, Marine Chemistry (12 units). 2011.

Co-Instructor, MIT 12.742, Marine Chemistry (12 units). With S. Doney. 2007-2010, 2012.

Co-Instructor, MIT 12.759, Marine Chemistry Seminar (6 units). With D. Repeta. 2006.

Instructor, Short-course on oceanography for BP scientists. 2011 & 2012.

Advising

Advisor to MIT/WHOI Joint Program Student Bethanie Edwards. 2010-present.

Advisor to MIT/WHOI Joint Program Student James Collins. 2011-present.

Advisor to MIT/WHOI Joint Program Student Kimberly Pependorf. 2007-2012

Advisor to MIT/WHOI Joint Program Student Laura Hmelo. 2005-2010.

Advisor to WHOI Postdoctoral Investigator James Fulton. 2011-present.

Advisor to WHOI Postdoctoral Scholar Patrick Martin. 2011-present

Co-Advisor to WHOI Postdoctoral Scholar Colleen Durkin. 2012-present.

Co-Advisor to WHOI Postdoctoral Scholar Suni Shah. 2010-present.

Co-Advisor to WHOI Postdoctoral Scholar Timothy Shanahan. 2006-2008.

Advisor to WHOI Summer Student Fellow Laura Sofen. 2010.

Advisor to WHOI/KAUST Summer Student Fellow Lauren Yum. 2009.

Co-advisor to WHOI Summer Student Fellow Rose Kantor. 2009.
Co-advisor to WHOI Summer Student Fellow Nick Ward. 2007.
Host for Czech Microbiology Laboratory Graduate Students Eva Žišková and Jan Pilný, 2010.
Host for Southampton/WHOI Exchange Student Patrick Martin, 2009.
Committee Member, Erin Bertrand, WHOI MC&G. 2009-2011.
Committee Member, Jesse Kneeland, WHOI MC&G. 2009-2011.
Committee Member, Hunter Oates, WHOI MC&G. 2007-2008.
Committee Member, Jennifer Culbertson. Boston University. 2005-2007.
Examining Committee Member, Peter Smyntek. SUNY ESF. 2007.
Supervised Science Fair project of Oliver Neumann, Regional Finalist, 2010-2011.
Supervised Science Fair project of Pippa Ryan, Commonwealth Finalist, 2009-2010.
Instructor, Marine Chemistry. With S. Doney. 2007-present.
Instructor, Marine Chemistry Seminar. With D. Repeta. 2006.
Advisor to 2005 class of MC&G JP students. With W. Martin. 2005-present.
Guest Lecturer, Introduction to Marine Geochemistry, University of Southampton. 2013
Guest lecturer, Marine Organic Geochemistry, MIT/WHOI Joint Program. 2005, 2007, 2013.
Guest lecturer, Phytoplankton Seminar, MIT/WHOI Joint Program. 2007.

NON-EDUCATION SUPERVISION AT WHOI:

Current

Helen Fredricks, Research Associate III. 2004-present.
Justin Ossolinski, Research Assistant III. 2007-present.

Past

Krista Longnecker, Research Associate III. 2009-2011.
Byron Pedler, Research Assistant II. 2006-2007
Katie Barott, Research Assistant II. 2006-2007
Oliver Newman. Part-time helper, 2012.
Olivia Kurz. Part-time helper. 2006.
Pia Hugus. Part-time helper. 2004.
Suzanne Crabtree. Volunteer. 2005.

CRUISE PARTICIPATION (* Chief Scientist):

* Western tropical North Atlantic, 2014, *R/V Atlantic Explorer*
Great Salt Lake, 2013, *R/V Bonneville*
Western North and South Atlantic, 2013 *R/V Knorr*
*North Atlantic, 2012, *R/V Knorr*.
* Sargasso Sea, North Atlantic, 2011. *R/V Atlantic Explorer*.
*North Pacific subtropical gyre, 2010. *R/V Kilo Moana*.
Gulf of Mexico, 2010. *R/V Endeavor*.
*Clayquot Sound, North Pacific, 2009. *R/V Clifford Barnes*.
Atlantis Deep, Red Sea. 2008. *R/V Oceanus*.
*Nova Scotia to Bermuda, North Atlantic. 2008. *R/V Oceanus*.
Bermuda to Puerto Rico, North Atlantic. 2007. *R/V Atlantic Explorer*.
Sargasso Sea, North Atlantic. 2007. *R/V Atlantic Explorer*.

- * Massachusetts shelf break, North Atlantic. 2005. R/V *Tioga*.
- Easter Island to Concepcion, Chile; South Pacific. 2004. R/V *L'Atalante*
- Hawaiian Ocean Time-Series cruise #161; North Pacific. 2004. R/V *Kilo Moana*.
- Hawaiian Ocean Time-Series cruise #157; North Pacific. 2004. R/V *Kaimikai-o-Kanaloa*
- Hawaiian Ocean Time-Series cruise #150; North Pacific. 2003. R/V *Kaimikai-o-Kanaloa*
- Hawaiian Ocean Time-Series cruise #140; North Pacific. 2002. R/V *Kaimikai-o-Kanaloa*
- Orca Basin; Gulf of Mexico. 2002. R/V *Suncoaster*.
- * Carr Inlet, Puget Sound Washington, 2002. R/V *Clifford Barnes*.
- Transect off Washington coast; North Pacific. 2001. R/V *Thomas Thompson*.
- *Saanich Inlet, B.C.; Strait of Georgia. 2001. R/V *Clifford Barnes*.
- *Saanich Inlet, B.C.; Strait of Georgia . 2000. R/V *Clifford Barnes*.
- * Carr Inlet, Washington; Puget Sound. 2000. R/V *Clifford Barnes*.
- Eastern tropical North Pacific; 2000. R/V *New Horizon*.
- Orca Basin; Gulf of Mexico. 1997. R/V *Longhorn*.
- Sargasso Sea; North Atlantic. 1995. R/V *Cape Hatteras*

PAPERS IN REFEREED JOURNALS (*Member of Van Mooy Lab Group; †Guest Investigator in the Van Mooy Lab):

46. Ray, J.L., Haramaty, L., Thyrhaug, R., *Fredricks, H.F., **Van Mooy, B.A.S.**, Bidle, K.D., Larsen, A., Sandaa, R.-A., In press. Virus infection of *Haptolina ericina* and *Phaeocystis pouchetii* implicates evolutionary conservation of programmed cell death induction in marine haptophyte-virus interactions. *J. Plankton Res.*
45. †Bellinger, B.J., **Van Mooy, B.A.S.**, Cotner, J.B., *Fredricks, H.F., Benitez-Nelson, C.R., Thompson, J., Cotter, A., Knuth, M., Godwin, C.M., 2014. Physiological modifications by seston in response to physicochemical gradients within Lake Superior. *Limnol Oceanogr.* **59**: 1011-1026.
44. *Martin, P., Dyhrman, S.T., Lomas, M.W., Poulton, N., **Van Mooy, B.A.S.**, 2014 Accumulation and enhanced cycling of polyphosphate by Sargasso Sea plankton in response to low phosphorus. *Proc Natl Acad Sci USA.* **111**: 8089-8094.
- 43 *Fulton, J.M., *Fredricks, H.F., Bidle, K.D., Vardi, A., Kendrick, B.J., DiTullio, G.R., **Van Mooy, B.A.S.**, 2014. Novel molecular determinants of viral susceptibility and resistance in the lipidome of *Emiliana huxleyi*. *Environ. Microbiol.* **16**: 1137-1149.
42. Rose, S.L., *Fulton, J.M., Brown, C.M., Natale, F., **Van Mooy, B.A.S.**, Bidle, K.D. 2014. Isolation and characterization of lipid rafts in *Emiliana huxleyi*: a role for membrane microdomains in host-virus interactions. *Environ. Microbiol.* **16**: 1150-1166.
41. **Van Mooy B.A.S.**, *Hmelo L.R., *Fredricks H.F., *Ossolinski J.E., *Pedler B.E., Bogorff D.J., Smith P.J.S. 2014. Quantitative exploration of the contribution of settlement, growth, dispersal, and grazing to the accumulation of natural marine biofilms on antifouling and fouling-release coatings. *Biofouling.* **30**: 223-236.
40. †Shanahan T.M., Huguen K.A., **Van Mooy B.A.S.** 2013. Temperature sensitivity of branched and isoprenoidal GDGTs in Arctic lakes. *Org Geochem.* **64**:119-128.
39. *Popendorf, K.J., *Fredricks, H.F., and **Van Mooy, B.A.S.** (2013) Molecular-ion independent quantitation of intact polar diacylglycerolipids in marine plankton using triple quadrupole MS. *Lipids* **48**: 185-195.

38. *Martin, P., and **Van Mooy, B.A.S.** (2013) Fluorometric quantification of polyphosphate in marine samples: dissolution protocols, matrix effects, and nucleic acid interference, *Appl Environ Microb.* **79**: 273-281.
37. Schouten, S., Hopmans, E.C., Rosell-Melé, A., Pearson, A., Adam, P., Bauersachs, T., Bard, E., Bernasconi, S.M., Bianchi, T.S., Brocks, J.J., Carlson, L.T., Castañeda, I.S., Derenne, S., Selver, A.D., Dutta, K., Eglinton, T., Fosse, C., Galy, V., Grice, K., Hinrichs, K.-U., Huang, Y., Huguet, A., Huguet, C., Hurley, S., Ingalls, A., Jia, G., Keely, B., Knappy, C., Kondo, M., Krishnan, S., Lincoln, S., Lipp, J., Mangelsdorf, K., Martínez-García, A., Ménot, G., Mets, A., Mollenhauer, G., Ohkouchi, N., Ossebaar, J., Pagani, M., Pancost, R.D., Pearson, E.J., Peterse, F., Reichart, G.-J., Schaeffer, P., Schmitt, G., Schwark, L., *Shah, S.R., Smith, R.W., Smittenberg, R.H., Summons, R.E., Takano, Y., Talbot, H.M., Taylor, K.W.R., Tarozo, R., Uchida, M., van Dongen, B.E., **Van Mooy, B.A.S.**, Wang, J., Warren, C., Weijers, J.W.H., Werne, J.P., Woltering, M., Xie, S., Yamamoto, M., Yang, H., Zhang, C.L., Zhang, Y., Zhao, M., Damsté, J.S.S., 2013. An interlaboratory study of TEX86 and BIT analysis of sediments, extracts, and standard mixtures. *Geochemistry, Geophysics, Geosystems* **14**, 5263-5285.
36. †Vardi, A., Haramaty, L., **Van Mooy, B.A.S.**, *Fredricks, H.F., Kimmance, S., Larsen, A., Bidle, K.D. (2012) Host-virus dynamics and subcellular controls of cell fate in a natural coccolithophore population. *Proc. Natl. Acad. Sci.*, **109**: 19327-19332.
35. O'Neil, G.W., C.A. Carmichael, T.J. Goepfert, J.M. *Fulton, G. Knother, C.P.L. Lau, S.R. Lindell, N.G.-E. Mohammady, **B.A.S. Van Mooy**, and C.M. Reddy, (2012) Beyond fatty acid methyl esters: Expanding the renewable carbon profile with microalgal lipids from *Ishochrysis* sp. *Energy and Fuels*, **26**: 2432-2441.
34. *Hmelo, L.R., **Van Mooy, B.A.S.**, and Mincer, T.J. (2012) Bacterial epibionts in *Trichodesmium* colonies are distinct from bacteria in surrounding waters. *Aquat. Microb. Ecol.* **67**: 1-14.
33. *Bellinger, B. J. and **Van Mooy, B. A. S.** (2012) Non-phosphorus lipids in periphyton reflect available nutrients in the Florida Everglades, U.S.A. *J. Phycol.* **48**: 303-311.
32. **Van Mooy, B. A. S.**, *Hmelo, L.R., *Sofen, L.E., Campagna, S.R., May, A.L., Dyhrman, S.T., Heithoff, A., Webb, E.A., Momper, L., Mincer, T.J. (2012) Quorum sensing control of phosphorus acquisition in *Trichodesmium* consortia. *ISME J.* **6**:422-429.
31. Reddy, C.M., Arey, J.S., Seewald, J.S., Sylva, S.P., Lemkau, K.L., Nelson, R.K., Carmichael, C.A., McIntyre, C.P., Fenwick, J., Ventura, G.T., **Van Mooy, B.A.S.**, and Camilli, R. (2012) Composition and fate of gas and oil released to the water column during the *Deepwater Horizon* spill. *Proc. Nat. Acad. Sci., USA.* **109**: 20229-20234.
30. *Popendorf, K.J., Lomas, M.W., and **Van Mooy, B.A.S.** (2011) Microbial sources of intact polar diacylglycerolipids in the western North Atlantic Ocean. *Org. Geochem.* **42**: 803–811.
29. *Popendorf K.J., Tanaka T., Pujo-Pay M., Lagaria A., Couties C., Conan P., Oriol L., Sofen L.E., Moutin T., **Van Mooy B.A.S.** (2011). Gradients in intact polar diacylglycerolipids across the Mediterranean Sea are related to phosphate availability. *Biogeosci.* **8**: 2547-2560.
28. Wurch, L.L, Bertrand, E, Saito, M., **Van Mooy, B.A.S.**, Dyhrman, S.T. (2011). Proteome changes driven by phosphorus deficiency and recovery in the brown-tide forming alga *Aureococcus anophagefferens*. *PLoS One* **6**: e28949.
27. *Hmelo L.R., Mincer T. J., and **Van Mooy B. A. S.** (2011) Possible influence of bacterial quorum sensing on the hydrolysis of sinking particulate organic carbon in marine environments. *Environ. Microbiol. Reports* **3**: 682-688.

26. *Edwards, B.R., Reddy, C.M., Camilli, R., Carmichael, C., *Longnecker, K., **Van Mooy, B.A.S.** (2011) Rapid microbial respiration of *Deepwater Horizon* oil in surface waters of the Gulf of Mexico. *Environ. Res. Lett.* **6**: 035301
25. *Martin P., **Van Mooy B. A. S.**, Heithoff A., and Dyhrman S. T. (2011) Phosphorus supply drives rapid turnover of membrane phospholipids in the diatom *Thalassiosira pseudonanna*. *ISME J.* **5**, 1057-1060.
24. **Van Mooy B. A. S.** and *Fredricks H. F. (2010) Bacterial and eukaryotic intact polar lipids in the eastern subtropical South Pacific: water-column distribution, planktonic sources, and fatty acid composition. *Geochimica et Cosmochimica Acta.* **74**: 6499-6516.
23. *Longnecker K., Lomas M. W., and **Van Mooy B. A. S.** (2010) Abundance and diversity of heterotrophic bacterial cells assimilating ³³P-phosphate in the subtropical North Atlantic Ocean. *Environ. Microbiol.* **12**: 2773-2782.
22. Camilli R., Reddy C. M., Yoerger D. R., **Van Mooy B. A. S.**, Jakuba M. V., Kinsey J. C., McIntyre C. P., Sylvan S. P., and Maloney J. V. (2010) Tracking hydrocarbon plume transport and biodegradation at *Deepwater Horizon*. *Science.* **330**: 201-204.
21. †Vardi A., **Van Mooy B. A. S.**, *Fredricks H. F., *Popendorf K. J., *Ossolinski J. E., Haramaty L., and Bidle K. A. (2009) Viral glycosphingolipids induce lytic infection and cell death in marine phytoplankton. *Science* **326**, 861-865.
20. *Hmelo, L. R. and **Van Mooy, B.A.S.** (2009) Kinetic constraints on acylated homoserine lactone-based quorum sensing in marine environments. *Aquat. Microb. Ecol.* **54**:127-133.
19. **Van Mooy, B.A.S.**, *Fredricks, H.F., *Pedler, B.E., Dyhrman, S.T., Karl, D.M., Koblížek, M., Lomas, M.W., Mincer, T., Moore, L.R., Moutin, T., Rappé, M.S., and Webb, E.A. (2009) Phytoplankton in the ocean substitute lipids in response to phosphorus scarcity. *Nature.* **458**:69-72.
18. Schouten, S., Hopmans, E. C., van der Meer, J., Mets, A., Bard, E., Bianchi, T. S., Diefendorf, A., Escala, M., Freeman, K. H., Furukawa, Y., Huguet, C., Ingalls, A., Ménot-Combes, G., Nederbragt, A. J., Oba, M., Pearson, A., Pearson, E. J., Rosell-Melé, Schaeffer, P., Shah, S. R., *Shanahan, T., Smith, R. W., Smittenburg, R., Talbot, H. M., Uchida, M., **Van Mooy, B. A. S.**, Yamamoto, M., Zhang, Z., and Sinnginghe Damsté, J. S.: (2009) An interlaboratory study of TEX86 and BIT analysis using high-performance liquid chromatography-mass spectrometry. *Geochem. Geophys. Geosyst.*, **10**, Q03012.
17. **Van Mooy, B.A.S.** and A.H. Devol (2008) Assessing nutrient limitation of *Prochlorococcus* in the North Pacific subtropical gyre by using an RNA capture method. *Limnol. Oceanogr.* **53**:78-88.
16. **Van Mooy, B.A.S.**, Moutin, T., Duhamel, S., Rimmelin, P., and Van Wambeke, F. (2008) Phospholipid synthesis rates in the eastern subtropical South Pacific Ocean. *Biogeosciences* **5**:95-109.
15. Dehairs, F., S. Jacquet, N. Savoye, J. Bishop, **B. A. S. Van Mooy**, K. Buesseler, C. Lamborg, M. Elskens, P. Boyd, K. Casciotti and W. Baeyens (2008). Barium in twilight zone suspended matter as a proxy for particulate organic carbon mineralization: Results for the North Pacific. *Deep-Sea Research II.* **55**:1673-1672.
14. Elskens, M., N. Brion, K.O. Buesseler, **B.A.S. Van Mooy**, P. Boyd, F. Dehairs. N. Savoyes and W. Baeyens (2008). Primary, new and export production in the NW Pacific Subarctic Gyre during the VERTIGO K2 experiments. *Deep-Sea Res. II.* **55**: 1594-1604.
13. Ventura, G.T., Kenig, F., Frysinger, G.S., Reddy, C.M., Nelson, R.K., **Van Mooy, B.A.S.** and Gaines, R.B. (2008) Composition and formation of unresolved complex mixtures in

- Late Archean sediments using comprehensive two-dimensional gas chromatography (GCxGC). *Org. Geochem.* 39:846-867.
12. Steinberg, D.K., **B.A.S. Van Mooy**, K.O. Buesseler, P.W. Boyd, T. Kobari and D.M. Karl (2008). Microbial vs. zooplankton control of sinking particle flux in the ocean's twilight zone. *Limnol. Oceanogr.* 53:1327-1338.
 11. Moutin, T., Karl, D., Duhamel, S., Rimmelin, P., Raimbault, P. and **Van Mooy, B.** (2008) Phosphate availability: ultimate control of new nitrogen input by nitrogen fixation in the tropical Pacific Ocean. *Biogeosciences* 5:95-109.
 10. Duhamel, S., Moutin, T., Van Wambeke, F., **Van Mooy, B.**, Rimmelin, P. Raimbault, P. and Claustre, H. (2007) Growth and P-specific uptake rates of bacterial and phytoplanktonic communities in the Southeast Pacific (BISOSPE cruise). *Biogeosciences* 4:941-956.
 9. Dyhrman, S.T., Ammerman, J.W., and **Van Mooy, B.A.S.** (2007) Microbes and the marine phosphorus cycle. *Oceanography*. 20:110-116.
 8. Buesseler, K.O., Lamborg, C.H., Boyd, P.W., Lam, P.J., Trull, T.W., Bidigare, R.R., Bishop, J.K.B., Casciotti, K.L., Dehairs, F., Elskens, M., Honda, M., Karl, D.M., Siegel, D.A., Silver, M.W., Steinberg, D.K., Valdes, J., **Van Mooy, B.**, Wilson, S. (2007) Revisiting carbon flux through the ocean's twilight zone. *Science*. 316:567-570.
 7. **Van Mooy, B.A.S.**, Rocap, G., *Fredricks, H.F., *Evans, C.T., and Devol, A.H. (2006) Sulfolipids dramatically decrease phosphorus demand by picocyanobacteria in oligotrophic marine environments. *Proc. Natl. Acad. Sci.* 103:8607-8612.
 6. **Van Mooy, B.A.S.**, Devol, A.H., and Keil, R.G. (2004) Quantifying ³H-thymidine incorporation rates by a phylogenetically defined group of marine planktonic bacteria (*Bacterioidetes* phylum). *Environ. Microbiol.* 6: 1061-1069.
 5. **Van Mooy, B.A.S.**, Devol, A.H., and Keil, R.G. (2004) Relationships between bacterial community structure, light, and carbon cycling in the eastern subarctic North Pacific. *Limnol. Oceanogr.* 49:1056-1062.
 4. **Van Mooy, B.A.S.**, Keil, R.G. and Devol, A.H. (2002) Impact of suboxia on sinking particulate organic carbon: Enhanced carbon flux and preferential degradation of amino acids via denitrification. *Geochim. Cosmochim. Acta* 66: 457-465.
 3. **Van Mooy, B.A.S.** and Keil, R.G. (2002) Seasonal variation in sedimentary amino acids and the association of organic matter with mineral surfaces in a sandy eelgrass meadow. *Mar. Ecol. Prog. Ser.* 227:275-280.
 2. **Van Mooy, B.**, MacGregor, B., Hollander, D., Neilson, K., and Stahl, D. (2001) Evidence of tight coupling between bacteria and particulate organic carbon during seasonal stratification of Lake Michigan. *Limnol. Oceanogr.* 46:1202-1208.
 1. MacGregor, B.J., **Van Mooy, B.**, Baker, B.J., Mellon, M., Moisander, P.H., Paerl, H.W., Zehr, J., Hollander, D.J. and Stahl, D.A. (2001) Microbiological, molecular biological and stable isotope evidence for nitrogen fixation in the open waters of Lake Michigan. *Environ. Microbiol.* 3: 205-219.

INVITED LECTURES AND PAPERS PRESENTED AT MEETINGS:

- Van Mooy, B.A.S.** (2013) Quorum Sensing and the Marine Carbon Cycle: How Might Microbial Communications Control the Levels of Carbon Dioxide in the Atmosphere?

Twenty-fifth Annual Kavli Frontiers of Science Symposium, National Academy of Science Beckman Center, Irvine, CA.

- Van Mooy, B.A.S.** (2013) The fundamental microbial processes that contribute to the accumulation of natural biofilms on ships' hulls. *Department of Marine Chemistry and Geochemistry, WHOI. Woods Hole, MA.*
- Van Mooy, B.A.S.** (2013) It take a village to raise a phytoplankter: the colonial cyanobacterium *Trichodesmium*. *Workshop for Middle- and High-School Teachers, Woods Hole, MA.*
- Van Mooy, B.A.S.** (2012) Microbial sources and biogeochemical roles of non-phosphorus lipids in the upper ocean. *LDEO, Palisades, NY.*
- Van Mooy, B.A.S.** (2012) Role of infochemical signaling in carbon and nutrient cycling in marine systems. *EAPS – MIT, Cambridge, MA.*
- Van Mooy, B.A.S.** (2012) Role of infochemical signaling in carbon and nutrient cycling in marine systems. *NOCS, Southampton, UK.*
- Van Mooy, B.A.S.** (2012) Role of infochemical signaling in carbon and nutrient cycling in marine systems. *UMass-Dartmouth, New Bedford, MA.*
- Van Mooy, B.A.S.** (2012) Microbial lipids as indicators of *in situ* microbial processes in ship-hull biofilms. *ONR-SEACOAT Workshop, Las Vegas, NV.*
- Van Mooy, B.A.S.,** Edwards, B., Reddy, C.R., Camilli, R., Carmichael, C., Longnecker, K. (2012) Microbial respiration of oil in surface waters in close proximity to the Deepwater Horizon site. *SOST DWH Workshop, St. Petersburg, FL.*
- Van Mooy, B.A.S.** (2011) Microbial sources and biogeochemical roles of non-phosphorus lipids in the upper ocean. *Gordon Research Conference – Chemical Oceanography.* Andover, NH.
- Van Mooy, B.A.S.** (2011) Cell-density dependent organic carbon degradation among particle associated bacteria in the ocean. *Aquatic Microbiology Symposium – Canadian Society of Microbiologists.* St. John's, Newfoundland, Canada.
- Van Mooy, B.A.S.** (2011) Microbial lipids as indicators of microbial processes and novel anti-fouling strategies in natural ship-hull biofilms. *ONR Coatings/Biofouling Program Review.* New Orleans, LA.
- Van Mooy, B.A.S.** and B. Jenkins. (2011) Town Hall Meeting: Microbial biogeography and biogeochemistry. *ASLO Meeting.* San Juan, Puerto Rico.
- Van Mooy, B.A.S.** (2011) Changes in the lipids of marine phytoplankton in response to environmental stressors. *Gordon Research Conference – Plant Lipids.* Galveston, TX.
- Van Mooy, B.A.S.** (2010) Calculus of P-Acquisition versus P-sparing by plankton in the oligotrophic ocean. *AGU Fall Meeting,* San Fransisco, CA.
- Van Mooy, B.A.S.** (2010) Calculus of P-Acquisition versus P-sparing by plankton in the Sargasso Sea. *IMBER IMBIZO II Meeting,* Heraklion, Greece.
- Van Mooy, B.A.S.** (2010) Role of polar lipids in the infection of *Emiliana huxleyi* by coccolithoviruses. *Gordon Research Conference – Organic Geochemistry.* Holderness School, Holderness, NH
- Van Mooy, B.A.S.** (2010) Membrane lipid dynamics in the upper ocean and the promise of lipidomics for marine microbiology. *Omics and Emerging Tools at the Interface of Chemistry and Biology – University of Tennessee.* Knoxville, TN.
- Van Mooy, B.A.S.** (2009) Role of quorum sensing in the degradation of sinking particulate carbon in the upper ocean. *Marine and Coastal Sciences Seminar.* Rutgers University.

- Van Mooy, B.A.S.** (2009) Role of quorum sensing in the degradation of sinking particulate carbon in the upper ocean. *Environmental Geochemistry and Geology Seminar*. Princeton University.
- Van Mooy, B.A.S.,** Boyd, P., Carlson, C., White, S. (2009) Assessing Bacterial Carbon Demand (and other Processes) in the Twilight Zone: Results from VERTIGO and Future Approaches. *AGU Chapman Conference – Biological Pump*. Southampton, UK.
- Van Mooy, B.A.S.** (2009) Microbial lipids as indicators of microbial processes and novel anti-fouling strategies in natural ship-hull biofilms. *ONR Coatings/Biofouling Program Review*. Portland, OR.
- Van Mooy, B.A.S.** (2008) Mass spectrometry-based study of microfouling community dynamics and cell-cell signaling in ship hull biofilms. *ONR Coatings/Biofouling Program Review*. Charleston, S.C.
- Van Mooy, B.A.S.** (2008). Phospholipid substitutions by phytoplankton are a universal adaptation to oligotrophy. *Marine Sciences Seminar*. University of Southern California.
- Van Mooy, B.A.S.** (2008). Phospholipid substitutions by phytoplankton are a universal adaptation to oligotrophy. *Marine Chemistry Seminar*. University of South Florida. St. Petersburg, Florida.
- Van Mooy, B.A.S.** (2007). Phospholipid substitutions by phytoplankton are a universal adaptation to oligotrophy. *Chemical Oceanography Seminar*. Massachusetts Institute of Technology. Cambridge, Massachusetts.
- Van Mooy, B.A.S.** (2007) Mass spectrometry-based study of microfouling community dynamics and cell-cell signaling in ship hull biofilms. *ONR Coatings/Biofouling Program Review*. Monterey, California.
- Van Mooy, B.A.S.** (2007) Rapid Growth by Heterotrophic Bacteria in the Subtropical Gyres. *Department of Marine Chemistry and Geochemistry Seminar*. Woods Hole Oceanographic Institution. Woods Hole, Massachusetts.
- Van Mooy, B.A.S.** (2007) Turnover rates of phospholipids in the oligotrophic South Pacific: a signal of rapid microbial phosphorus cycling? *Special Seminar*. Centre d'Océanologie de Marseille, Marseille, France.
- Van Mooy, B.A.S.** (2006) Overview of graduate and summer programs at Woods Hole Oceanographic Institution. *Senior Seminar*. Barnard College, New York, New York.
- Van Mooy, B.A.S.** (2006) Mass spectrometry-enabled investigation of bacterial cell-cell signaling in the sea. *Brown Bag Seminar*. Barnard College, New York, New York.
- Van Mooy, B.A.S.** (2006) Bacterial cell-cell signaling molecules in marine environments. *ONR Progress Review, Northeast Region*. Woods Hole Oceanographic Institution. Woods Hole, Massachusetts
- Van Mooy, B.A.S.** (2006) Mass spectrometry-based study of bacterial community succession and cell-cell signaling in ship hull biofilms. *ONR Coatings/Biofouling Program Review*. Towson, Maryland.
- Van Mooy, B.A.S.** (2006) Sulfolipids dramatically decrease phosphorus demand by picocyanobacteria in oligotrophic marine environments: Implications for the Proterozoic Ocean. *Department of Geological Sciences Seminar*, Northwestern University, Evanston, Illinois.
- Van Mooy, B.A.S.** (2006) Sulfolipids dramatically decrease phosphorus demand by picocyanobacteria in oligotrophic marine environments. *Earth and Planetary Science Department Seminar*, Harvard University, Cambridge, Massachusetts.

- Van Mooy, B.A.S.** (2005) Phospholipids in the Pacific Ocean. *Botany Seminar*. Czech Academy of Science. Ceske Budejovice, Czech Republic.
- Van Mooy, B.A.S.** (2005) Phospholipid synthesis by heterotrophic bacteria was a significant biochemical sink for plankton phosphorus uptake. *BIOSCOPE Meeting*. Villefranche, France.
- Van Mooy, B.A.S.** (2004) The biochemical and microbiological fates of phosphate in oligotrophic marine systems. *Department of Chemical Oceanography Seminar*. Massachusetts Institute of Technology. Cambridge, Massachusetts.
- Van Mooy, B.A.S.** (2004) Taxon-specific DOC and phosphorus cycling in the North Pacific subtropical gyre. *Department of Marine Chemistry and Geochemistry Seminar*. Woods Hole Oceanographic Institution. Woods Hole, Massachusetts
- Van Mooy, B.A.S.** (2004) Genomes, ribosomes and membranes: tracing the fate of phosphorus in plankton. *Assembly of MIT-WHOI Joint Program Students*. Woods Hole Oceanographic Institution. Woods Hole, Massachusetts
- Van Mooy, B.A.S.** (2003) Carbon and phosphorus cycling by phylogenetically-defined groups of bacteria in the North Pacific Ocean. *Department of Chemical Oceanography Seminar*. University of Washington. Seattle, Washington.
- Van Mooy, B.A.S.** (2003) Tracing taxon specific growth in aquatic systems. *Large Lakes Observatory and Department of Chemistry Seminar*. University of Minnesota, Duluth. Duluth, Minnesota.
- Van Mooy, B.A.S.** (2003) Application of a novel DNA-tracing method to the study of carbon cycling by heterotrophic bacteria in the North Pacific. Geophysical Laboratory. Carnegie Institution of Washington. Washington, D.C.

LECTURES AND PAPERS PRESENTED AT MEETINGS:

- Mouginot, C.; Lee, E. A.; **Van Mooy, B. A.**; Martiny, A. C.; Resource allocation by marine synechococcus in response to different nutrient supply ratios *Ocean Sciences Meeting*, Honolulu.
- Martin, P.; Dyhrman, S. T.; Lomas, M. W.; Poulton, N.; **Van Mooy, B.**; Marine microbial response to low phosphorus results in accumulation and enhanced cycling of polyphosphate in the sargasso sea *Ocean Sciences Meeting*, Honolulu.
- Collins, J. R.; Ossolinski, J. E.; Thamatrakoln, K.; Tagliaferre, J.; **Van Mooy, B. A.**; Budgeting respiratory loss processes: explaining observed variation in particle flux attenuation at seven stations in the north atlantic *Ocean Sciences Meeting*, Honolulu.
- Edwards, B. R.; Thamatrakoln, K.; Ossolinski, J. E.; Bidle, K. D.; **Van Mooy, B. A.**; The effects of oxylipins on particle associated microbial communities: implications for the silica cycle *Ocean Sciences Meeting*, Honolulu.
- Kendrick, B. J.; DiTullio, G. R.; Fulton, J. M.; **Van Mooy, B. A.**; Bidle, K. D.; Temperature induced viral resistance in the coccolithophorid, *Emiliana huxleyi* (prymnesiophyceae) *Ocean Sciences Meeting*, Honolulu.
- Coolen, M. J.; More, K.; Balkema, C.; **Van Mooy, B.**; Bidle, K.; The role of environmental factors in shaping the genetic diversity of the North Atlantic *Emiliana huxleyi*-coccolithovirus system. *Ocean Sciences Meeting*, Honolulu.
- Laber, C. P.; Boss, E.; Vardi, A.; **Van Mooy, B. A.**; Bidle, K. D.; Assessing the impact of coccolithovirus infection on bloom and ecosystem dynamics in the north atlantic using in situ optical profiling floats *Ocean Sciences Meeting*, Honolulu.

- Fulton, J. M.; **Van Mooy, B.**; Collins, J. R.; Hunter, J. E.; Bidle, K.; Lipid connections between viral termination of coccolithophore blooms and carbon export. *Ocean Sciences Meeting*, Honolulu.
- Bidle, K. D.; **Van Mooy, B. A.**; Vardi, A.; DiTullio, G.; Coolen, M. J.; Lubrication of oceanic carbon and sulfur cycling by a host-virus chemical arms race: 'north atlantic virus infection of coccolithophores expedition' (navice) *Ocean Sciences Meeting*, Honolulu.
- Van Mooy, B.**, Dyhrman, S., Alexander, H., and Ossolinski, J. (2013) Influence of quorum sensing on phosphorus acquisition and nitrogen fixation by *Trichodesmium* in the equatorial Atlantic. *Gordon Research Conference Chemical Oceanography* Biddeford, Maine.
- Van Mooy, B.**; Edwards, B. R.; Hmelo, L. R.; May, A. L.; Campagna, S. R.; Keil, R. G.; Mincer, T. J.; Ossolinski, J. E.; Sofen, L. E.; (2013) Influence of bacterial quorum sensing on organic matter hydrolysis in sinking particles. *Aquatic Sciences Meeting*. New Orleans.
- Martin, P.; **Van Mooy, B.**; Bender, S.; Armbrust, G.; (2013) Ocean sections of polyphosphate and membrane lipids show distinct microbial responses to phosphorus stress and resupply. *Aquatic Sciences Meeting*. New Orleans.
- Fulton, J.M., Fredricks, H.F, Vardi, A., Kendrick, B.J., DiTullio, G.R., Bidle, K.D., **Van Mooy, B.A.S.**, (2013) Lipidome of the *Emiliana huxleyi*-coccolithovirus system in a warming ocean. *Aquatic Sciences Meeting*. New Orleans.
- Edwards, B.R., May, A.L., Ossolinski, J.E., Fredricks, H.F., Campagna, S., and **Van Mooy, B.A.S.**, (2013) The Potential Impacts of Allelopathy Between Diatoms and Particle Attached Bacteria On Export Efficiency, *Aquatic Sciences Meeting*. New Orleans.
- Collins, J. R., Valdes, J. R., Ossolinski, J. E., Keil, R. G., **Van Mooy, B. A. S.**, (2013) The PHORCYS: An autonomous, dual-chamber in situ incubator for the estimation of community metabolism, *Aquatic Sciences Meeting*. New Orleans.
- Fredricks, H.F., Fulton, J., Dyhrman, S., **Van Mooy, B.A.S.**, (2013) The flexible lipidome of *Emiliana huxleyi*; the capacity to cope with multiple nutrient stresses, *Aquatic Sciences Meeting*. New Orleans.
- Shah, S.R., Griffith, D.R., Galy, V., McNichol, A.P., **Van Mooy, B.A.S.**, Eglinton, T.I.,(2012) Isotopic indications of microbial metabolic activities in the Arctic Ocean, *Gordon Research Conference on Organic Geochemistry*. Holderness, NH.
- Fulton, J.M., Longnecker, K., Fredricks, H.F, **Van Mooy, B.A.S.** (2012) Intact polar lipid degradation in the Sargasso Sea. *Gordon Research Conference on Organic Geochemistry*. Holderness, NH.
- Shah, S.R., Pendorf, K, **Van Mooy, B.A.S.**, (2012) Towards stable carbon isotopic composition of intact polar lipids in the Sargasso Sea, *Ocean Sciences Meeting*. Salt Lake City.
- Pendorf, K. J.; Tanaka, T.; Pujo-Pay, M.; Lagaria, A.; Courties, C.; Conan, P.; Oriol, L.; Sofen, L. E.; Moutin, T.; **Van Mooy, B.A.S.**(2012) Gradients in intact polar membrane lipids across the Mediterranean Sea are related to phosphate availability. *Ocean Sciences Meeting*. Salt Lake City.
- Keil, R. G.; Myers-Pigg, A. N.; van der Elst, K.; Neibauer, J.; Forrest, B.; Belcher, A. C.; Biladeau, C.; **Van Mooy, B.A.S.** Comparative organic geochemistry of sinking particles collected in net traps deployed in oligotrophic, coastal, and fjord settings. *Ocean Sciences Meeting*. Salt Lake City.

- Bidle, K. D.; Vardi, A.; Haramaty, L.; **Van Mooy, B.A.S.**; Fredricks, H. F.; Larsen, A.; Kimmance, S.; DiTullio, G. R.; A host-virus chemical arms race at sea: placing subcellular controls on the cell fate into and ecological and biogeochemical context. *Ocean Sciences Meeting*. Salt Lake City.
- Edwards, B.R., Sofen, L.E., May, A.L., Campagna, S.R., Popendorf, K.J. **Van Mooy, B.A.S.** (2012) The effects of polyunsaturated aldehydes on the microbial communities associated with sinking POM from the Sargasso Sea during a spring bloom. *Ocean Sciences Meeting*. Salt Lake City.
- Campagna, S.R., May, A.L., Gooding, J.R., Szul, M.J., Zinser, E.R., Van Mooy, B.A.S. (2011) Application of liquid chromatography-tandem mass spectrometry based metabolomics and kinetic flux profiling to the study of carbon cycling and cell-cell signaling in oceanic microbial communities. *American Chemical Society Meeting* Denver, CO.
- Fredricks, H., Fulton, J., Vardi, A., Bidle, K., **Van Mooy, B.A.S.** (2011) Exploring the lipidome of infected *Emiliana huxleyi*. The use of mass spectrometry for the structural elucidation of membrane lipids implicated in viral invasion. *Aquatic Virus Workshop 6*, Texel, Netherlands, October 2011.
- Fulton, J.M., Fredricks, H.F., Bidle, K.D., DiTullio, G.R., Vardi, A. **Van Mooy, B.A.S.** (2011) Lipid-based mechanisms of viral infection and defense in *Emiliana Huxleyi*. *Aquatic Virus Workshop 6*. Texel, The Netherlands.
- Van Mooy, B.A.S.** and Keil, R.G. (2011) The PHORCYS in situ incubation system. *OCB Scoping Workshop: a biogeochemical flux program aligned with OOI*. Woods Hole, MA.
- Martin, P., Moore, C., Torres-Valdes, S., Rocap, G., Pancost, R.D., Hernandez Sanches, M., **Van Mooy, B.A.S.** (2010) Sections of intact polar diacylglycerolipids in the South Atlantic reflect dissolved nitrogen and phosphorus distributions. *AGU Fall Meeting*, San Fransisco, CA.
- Vardi, A., **Van Mooy, B.**, Fredricks, H., Haramaty, L., and Bidle, K. (2010) Chemical Arms Race at Sea: The role of sphingolipids in regulating host-virus interactions in the marine coccolithophore *Emiliana huxleyi*. *Ocean Sciences Meeting*, Portland, OR.
- Miller, M., Kantor, R., Hmelo, L., **Van Mooy, B.**, and Mincer, T.J. (2010) Cultivation-based analyses of methylotrophic bacteria isolated from sinking marine aggregates in Clayoquot Sound, British Columbia. *Ocean Sciences Meeting*, Portland, OR.
- Kneeland, J.M., Hughen, K.A., Cervino, J., **Van Mooy, B.**, and Fredricks, H. (2010) Lipid Biomarkers of Thermal and Disease Stress in Coral Zooxanthellae. *Ocean Sciences Meeting*, Portland, OR.
- Van Mooy, B.**, Longnecker, K., and Popendorf, K. (2010) Phospholipid Turnover Rates Suggest Rapid Cycling of Heterotrophic Bacterial Carbon in the Upper Ocean. *Ocean Sciences Meeting*, Portland, OR.
- Popendorf, K., Tanaka, T., Van Wambeke, F., Pujo-Pay, M., Courties, C., Moutin, T., **Van Mooy, B.** (2010) Phospholipid production and turnover in a nutrient addition microcosm experiment in the Mediterranean. *Ocean Sciences Meeting*, Portland, OR.
- Yum, L., Bashir Ali, S., Heithoff, A., Dyhrman, S., **Van Mooy, B.** (2010) Phosphorus Cycling in the Red Sea: New Insights on Phosphorus Limitation in Oligotrophic Environments. *Ocean Sciences Meeting*, Portland, OR.
- Hmelo, L., **Van Mooy, B.**, and Mincer, T.J. Quorum sensing by particle-associated bacteria affects attenuation of particulate organic carbon flux in the oceans. *Ocean Sciences Meeting*, Portland, OR.

- Dyhrman, S T; Haley, S T; Wurch, L L; Ossolinski, J; **Van Mooy, B**; (2009) Expression of a nitrate transporter in cultures and field populations of the the coccolithophore *Emiliana huxleyi*. *ASLO Aquatic Sciences Meeting*, Nice, France.
- Vardi, A; **Van Mooy, B**; Fredricks, H; Haramaty, L; Bidle, K D; (2009) Virally-induced sphingolipids regulate host cell fate in the marine coccolithophore *Emiliana huxleyi*. *ASLO Aquatic Sciences Meeting*, Nice, France.
- Hmelo, L R; Mincer, T; **Van Mooy, B**; (2009) Characterization of epibiotic bacterial community associated with wild-type and laboratory cultured *Trichodesmium*. *ASLO Aquatic Sciences Meeting*, Nice, France.
- Van Mooy, B**; Fredricks, H F; Pedler, B E; Dyhrman, S T; Karl, D M; Koblizek, M; Lomas, M W; Mincer, T; Moore, L R; (2009) Phytoplankton in the oligotrophic ocean substitute phospholipids in response to phosphorus limitation on a global scale. *ASLO Aquatic Sciences Meeting*, Nice, France.
- Popendorf, K J; **Van Mooy, B A**; Fredricks, H F; Lomas, M W; Casey, J R; Johnson, C G; (2009) Functionally and taxonomically defined planktonic sources of intact polar lipids in the sea. *ASLO Aquatic Sciences Meeting*, Nice, France.
- Van Mooy, B.A.S.**, Fredricks, H.F., Pedler, B.E., Longnecker, K., Popendorf, K., Moutin, T., Van Wambeke, Koblížek, M., Prášil, O. (2008) Reexamining growth rates of heterotrophic bacteria in the open ocean by using a new membrane phospholipid tracing method. *Ocean Sciences Meeting*. Orlando, Florida.
- Hmelo, L.R., and **Van Mooy, B.A.** (2007) Investigation of acylated homoserine lactones in marine environments using electrospray-ionization mass spectrometry. *Aquatic Sciences Meeting*, Santa Fe, New Mexico.
- Steinberg, D.K., **Van Mooy, B.A.**, Buesseler, K.O., Boyd, P.W., Kobari, T., and Karl, D.M. (2007) Microbial vs. zooplankton control of sinking particle flux in the Ocean's twilight zone. *Aquatic Sciences Meeting*, Santa Fe, New Mexico.
- Van Mooy, B.**, Dyhrman, S. Fredricks, H., Pedler, B., Koblížek, M., Moore, L., Moutin T., Brandon, M., Rappé, M., Rocap, G., Webb, E. (2007) Membrane lipid substitutions are a widely distributed and quantitatively significant biochemical mechanism for phytoplankton to alter nutrient requirements. *Aquatic Sciences Meeting*, Santa Fe, New Mexico.
- Jones, V., **B. Van Mooy**, M. Weinbauer, A. Gogou, M.J. Collins, K. Penkman, C. Migon, D.J. Repeta. (2007) Degradation of dissolved organic matter: Chemical changes and the structure of the microbial community *38th CIESM Congress*, Istanbul, Turkey.
- Van Mooy, B.A.S.** (2006) New data suggests that bacterial production is tenfold higher than current estimates. *Biogeochemistry Seminar*. Woods Hole Oceanographic Institution. Woods Hole, Massachusetts.
- Van Mooy, B.A.S.** and Devol, A.H. (2006) Taxon-specific phosphate incorporation in the North Pacific subtropical gyre: application of a quantitative RNA hybridization capture method. *Ocean Sciences Meeting*. Honolulu, Hawaii.
- Fredricks, H.F. and **Van Mooy, B.A.S.** (2006) Identifying new Biomarkers for Marine Plankton Using Liquid Chromatography - Mass Spectrometry. *Poster - Ocean Sciences Meeting*. Honolulu, Hawaii.
- Moutin, T., Duhamel, S, Rimmelin, P, Van Wambeke, F, **Van Mooy, B**, Claustre, H (2006) Phosphate Pools and Turnover Time in the South Pacific Gyre (BIOSCOPE cruise 2004). *Ocean Sciences Meeting*. Honolulu, Hawaii.

- Popendorf, K and **Van Mooy, B.** (2006) A Liquid Chromatography/Mass Spectrometry-Enabled Study of Phosphatidylethanolamine: a Potential Proxy for the Turnover of Heterotrophic Bacterial Biomass. *Poster - Ocean Sciences Meeting*. Honolulu, Hawaii.
- Buesseler, K, Bishop, J, Casciotti, K, Dehairs, F, Lamborg, C, Siegel, D, Silver, M, Steinberg, D, Saito, S, Trull, T, Valdes, J, **Van Mooy, B** (2006) What We Know From VERTIGO. *Ocean Sciences Meeting*. Honolulu, Hawaii.
- Van Mooy, B.A.S.**, Devol, A.H., Fredricks, H.F., Moore, L., Moutin, T., Rocap, G., Van Wambeke, F., and Webb, E. (2005) Glycolipid Membranes Relieve Marine Picocyanobacteria of a Major Requirement for Phosphate. *ASLO Summer Meeting*, Santiago de Compostella, Spain.
- Van Mooy, B.A.S.** and Devol, A.H. (2005) RNA hybridization capture suggest N-limitation of *Prochlorococcus* during summer in the North Pacific Subtropical Gyre. *ASM General Meeting*, Atlanta.
- Van Mooy, B.A.S.**, Devol, A.H., and Fredricks, H.F. (2005) Nucleic acids and intact polar lipids as functional biomarkers of microbial processes in the surface ocean: implications for sedimentary records. *Aquatic Sciences Meeting*. Salt Lake City.
- Devol, A.H., **Van Mooy, B.A.S.*** and Keil, R.G. (2005) Relationships between bacterial community structure, light, and carbon cycling in the eastern subarctic North Pacific. *Aquatic Sciences Meeting*. Salt Lake City.
- Van Mooy, B.A.S.**, Evans, C.T., and Devol, A.H. (2004) Phosphate uptake by phylogenetically-defined groups of picoplankton in the North Pacific Subtropical Gyre. *AGU Ocean Sciences Meeting*. Portland, Oregon.
- Van Mooy, B.A.S.**, Hullar, M.A., Devol, A.H., Stahl, D.A., Hollander, D.J., and Evans, C.T. (2003) Microbial fate of phosphate in the oligotrophic waters of the Gulf of Mexico. *Aquatic Sciences Meeting*. Salt Lake City.
- Devol, A.H., **Van Mooy, B.A.S.**, and Keil, R.G. (2002) Thymidine incorporation by specific bacterioplankton in Puget Sound, a quantitative, phylogenetically-based method to separate DNA. *ASLO Summer Meeting*. Victoria, B.C.
- Van Mooy, B.A.S.**, Grocock, J., Devol, A.H., and Keil, R.G. (2002) Bacterioplankton community structure affects response to bioavailable DOC in the eastern subarctic Pacific. *ASLO Summer Meeting*. Victoria, B.C.
- Van Mooy, B.A.S.**, Devol, A.H., and Keil, R.G. (2001) Planktonic bacteria and archaea in a coastal bay. *Aquatic Sciences Meeting*. Albuquerque.
- Van Mooy, B.A.S.**, Keil, R.G., and Devol, A.H. (2000) Enhanced Flux of POC in oxygen deficient waters: impact of suboxia on bulk OC and amino acids. *Gordon Research Conference, Organic Geochemistry*. Hanover.
- Van Mooy, B.**, Keil, R., Devol, A.H. (2000) Early Diagenesis of particles sinking through the oxygen-deficient waters of the northwest Mexican margin. *Ocean Sciences Meeting*. San Antonio.
- Van Mooy, B.**, Hollander, D., MacGregor, B., Stahl, D., Baker, B. and Neilson, K. (1998) Lipid and nucleic acid characteristics of POM: Analysis of water column carbon and nitrogen cycles in Lake Michigan. *Ocean Sciences Meeting*. San Diego.
- Hollander, D., **Van Mooy, B.**, Fogel, M., Aguilar, C., and Paerl, H. (1996) Does phosphate control isotopic fractionation by stimulating CO₂ pumping in diatoms? *Ocean Sciences Meeting*. San Diego.

Van Mooy, B. and Sageman, B. (1994) Origin of Cretaceous skeletal limestones: Western Interior U.S. *Geological Society of America, National Meeting*. Seattle.

PATENTS:

Marine sample analysis system: in situ photosynthesis and respiration. *U.S. Patent Application*.

Van Mooy, B.A.S., Valdes, J., Keil, R.G.

Composition of matter: novel, bioactive glycosphingolipids from algae. *U.S. Patent Application*.

Van Mooy, B.A.S., Fredricks H.F., Bidle, K., Vardi, A. 2010.

Methods for obtaining bioactive compounds from phytoplankton. *U.S. Patent Application*. Van

Mooy, B.A.S., Fredricks H.F., Bidle, K., Vardi, A. 2009.