

COLLEEN B. MOUW

University of Rhode Island, Graduate School of Oceanography
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EDUCATION

2009	University of Rhode Island , Ph.D. Oceanography	Narragansett, RI
2003	University of Rhode Island , M.S. Oceanography	Narragansett, RI
2000	Western Michigan University , B.S. Biology, <i>Cum Laude</i>	Kalamazoo, MI

RESEARCH AND PROFESSIONAL EXPERIENCE

9/2016 – present	University of Rhode Island	Kingston, RI
1/2022 – present	<i>Associate Dean for Diversity and Academic Affairs</i> , Graduate School	
7/2019 – present	<i>Associate Professor</i> , Graduate School of Oceanography	
9/2016 – 6/2019	<i>Assistant Professor</i> , Graduate School of Oceanography	
9/2016 -	<i>Senior Fellow</i> , Coastal Institute	
8/2012 – 8/2016	Michigan Technological University , Department of Geological & Mining Engineering & Sciences <i>Assistant Professor</i> (tenure-track with 4 th year reappointment granted)	Houghton, MI
5/2010 – 8/2012	University of Wisconsin - Madison Cooperative Institute for Meteorological Satellite Studies Space Science and Engineering Center <i>Assistant Researcher</i>	Madison, WI
1/2009 – 4/2010	University of Wisconsin - Madison Space Science and Engineering Center Nelson Institute for Environmental Studies Center for Climatic Research Atmospheric and Oceanic Sciences Department <i>Postdoctoral Research Associate</i>	Madison, WI

SELECTED HONORS AND AWARDS

2019	Western Michigan University, Department of Biological Sciences, Alumni Achievement Award
2016	Presidential Early Career Award for Scientists and Engineers (PECASE), 2013 class
2009	NASA MPOWIR selected speaker
2007	Graduate School of Oceanography Alumni Fellowship, University of Rhode Island
2005-2008	NASA Earth and Space Science Fellowship
2005	Ricci Award, Graduate School Oceanography, University of Rhode Island
2004-2005	Rhode Island Space Grant/Vetlesen Climate Change Program Fellowship
2000	Hazel Wirick Award in Botany, Biological Sciences Department, Western Michigan University

TEACHING & ADVISING EXPERIENCE

2016 – present	University of Rhode Island	Narragansett, RI
	Sharing Science through Storytelling (under development)	
	Graduate Writing in Marine and Environmental Sciences (OCG 533, Spring 2017, 2018, Fall 2019, 2021; Developed online version Fall 2020 – Spring 2021)	
	General Oceanography (OCG 301, Fall 2017, 2018, 2019)	
	Marine Bio-Optics and Remote Sensing (OCG 665, Spring 2019)	
2012 - 2016	Michigan Technological University	Houghton, MI
	Aquatic Remote Sensing (GE 4670/5670, Spring 2013, 2014)	
	Oceanographic Science (GE 3670, Fall 2013)	
	Research in Biology (Remote Sensing in Fisheries Oceanography, BL 4000, Fall 2013)	

Fundamentals of Remote Sensing (GE 4250, Spring 2015)
 Career Essentials Seminar (Fall 2015)
 Scientific Communication (GE 5930, Spring 2016)

GRADUATE ADVISING

2021 – present, **Vitul Aragwal**, Ph.D. student, University of Rhode Island, Graduate School of Oceanography
 2021 – present, **Matt Guanci**, M.S. student, University of Rhode Island, Graduate School of Oceanography
 2021 – present, **Rowan Cirivello**, M.S. student, University of Rhode Island, Graduate School of Oceanography
 2020 – present, **Somang Song**, M.S. student, University of Rhode Island, Graduate School of Oceanography
 2019 – present, **Virginie Sonnet**, Ph.D. student, University of Rhode Island, Graduate School of Oceanography
 2018 – 2020, **Kyle Turner**, M.S. 2020, University of Rhode Island, Graduate School of Oceanography
[“Remote sensing of phytoplankton size classes on the northeast U.S. continental shelf”](#)
 2018 – 2020, **Jessica Carney**, M.S. 2020, University of Rhode Island, Graduate School of Oceanography,
[“Environmental and optical signatures of *Cochlodinium polykrikoides* in Narragansett Bay, Rhode Island”](#)
 2013 – 2019, **Angela Yu**, M.S. 2019, Michigan Tech University, Geological & Mining Engineering & Sciences,
[“Assessing the spatial and temporal variability of the Detroit River and harmful algal blooms in western Lake Erie”](#)
 2013 – 2018, **Brice Grunert**, Ph.D. 2018, Michigan Tech University, Geological & Mining Engineering & Sciences,
[“Characterizing CDOM spectral variability from seas to space”](#)
 2010 – 2012, **Haidi Chen**, Ph.D. 2015, University of Wisconsin-Madison, Department of Atmospheric & Oceanic Sciences, co-advisor with Dr. Galen McKinley

UNDERGRADUATE RESEARCH MENTORING

2021 Summer, **Victoria Wendover**, Summer Undergraduate Research Fellow in Oceanography (SURFO) from Jacksonville University
 2020 Summer, **Taylor Bowen**, Summer Undergraduate Research Fellow in Oceanography (SURFO) from Georgia Gwinnett College
 2020 - 2021, **Julia Lober**, Summer Undergraduate Research Fellow in Oceanography (SURFO) from Tufts University
 2018-2019, **Christopher Jenkins**, Summer Undergraduate Research Fellow (SURF) from University of Rhode Island and continued Research Assistant during academic year
 2018 Summer, **Cassandra Alexander**, Summer Undergraduate Research Fellow in Oceanography (SURFO) from Millersville University
 2017-2018, **Ian Lew**, University of Rhode Island, Environmental Science and Management
 2017 Summer, **Kyle Turner**, Summer Undergraduate Research Fellow in Oceanography (SURFO) from George Mason University
 2016 Summer, **Daniel Barton**, Michigan Technological University, Civil and Environmental Engineering
 2016 Summer, **Jason Jakary**, Michigan Technological University, Geology
 2015 – 2016, **Rebekka Guyon**, Michigan Technological University, Geological Engineering
 2013– 2016, **Ben Kramka**, Michigan Technological University, Geological Engineering
 2012 – 2013, **John Trochta**, Michigan Technological University, Environmental Engineering & Ecology, MTU Summer Undergraduate Research Fellowship recipient (summer 2013)
 2013 Fall, **Erin Collins**, Michigan Technological University, Forestry and Environmental Science
 2009, **Kelsey Obenour**, Valparaiso University, Geography and Meteorology Department
 2009, **Danielle Slotke**, Valparaiso University, Geography and Meteorology Department

PUBLICATIONS (** indicates advised graduate student co-author, * indicates advised undergraduate student co-author, † indicates supported laboratory staff; order of authorship indicates level of contribution)

2022 [47] Astrid Bracher, R.J.W. Brewin, Á.M. Ciotti, L. Clementson, T. Hirata, T. Kostadinov, C.B. Mouw, E. Organelli (2022) Chapter 7: Applications of satellite remote sensing to monitor phytoplankton diversity. In, *Advances in Phytoplankton Ecology*, Clementson, L. (ed), Elsevier.

- 2021 [46] **Turner, K.J., C.B. Mouw, K.J.W. Hyde, R. Morse, A.B. Ciochetto (2021) Optimization and assessment of phytoplankton size class algorithms for ocean color data on the Northeast U.S. continental shelf. *Remote Sensing of Environment*, 267: 112729, <https://doi.org/10.1016/j.rse.2021.112729>.
- [45] Cael, B.B., K. Bisson, M. Conte, M.T. Duret, C.L. Follett, S.A. Henson, M.C. Honda, M.H. Iversen, D.M. Karl, R.S. Lampitt, C.B. Mouw, F. Muller-Karger, C.A. Pebody, K.L. Smith Jr., D. Talmy (2021) Open ocean particle flux variability from surface to seafloor. *Geophysical Research Letters*, 48:9, <https://doi.org/10.1029/2021GL092895>.
- 2020 [44] Casey K.A., C.S. Rousseaux, W. Gregg, E. Boss, A. Chase, S. Craig, C.B. Mouw, R.A. Reynolds, D. Stramski, S. Ackleson, A. Bricaud, B. Schaeffer, M.R. Lewis, S. Maritorena, (2020) A global compilation of in situ aquatic high spectral resolution inherent and apparent optical property data for remote sensing applications. *Earth System Science Data*, 12: 1123-1139, <https://doi.org/10.5194/essd-12-1123-2020>.
- [43] Menden-Deuer, S., F. Morison, A. L. Montalbano, G. Franzè, J. Strock, E. Rubin, H. McNair, C.B. Mouw & P. Marrec (2020) Multi-instrument assessment of phytoplankton abundance and cell size in mono-specific laboratory cultures and whole plankton community composition in the North Atlantic, *Frontiers in Marine Science*, 7:254, <https://doi.org/10.3389/fmars.2020.00254>.
- [42] Mouw, C.B., C. Rousseaux, F. Mélin, H. Evers-King, A. Ibrahim, J. Werdell (2020) Chapter 2: Ocean Color Remote Sensing Overview. In, *Synergy Between Ocean Colour and Biogeochemical / Ecosystem Models*. Dutkiewicz, S. (ed.), IOCCG Report Series, No. 19, International Ocean Color Coordinating Group, Dartmouth, Canada. <http://dx.doi.org/10.25607/OBP-711>.
- [41] Dutkiewicz, S., A. Hickman, C.B. Mouw, C. Rousseaux, S. Ciavatta, M. Baird, C. Stock, F. Chai (2020) Chapter 4: The (mis)match between biogeochemical/ecosystem model variables and ocean colour products. In, *Synergy Between Ocean Colour and Biogeochemical/Ecosystem Models*. Dutkiewicz, S. (ed.), IOCCG Report Series, No. 19, International Ocean Color Coordinating Group, Dartmouth, Canada. <http://dx.doi.org/10.25607/OBP-711>.
- [40] Henson, S., C.B. Mouw, C. Rousseaux, J. Wiggert (2020) Chapter 7: Synergistic Use of Ocean Colour Data and Models to Understand Marine Biogeochemical Processes. In, *Synergy Between Ocean Colour and Biogeochemical/Ecosystem Models*. Dutkiewicz, S. (ed.), IOCCG Report Series, No. 19, International Ocean Color Coordinating Group, Dartmouth, Canada. <http://dx.doi.org/10.25607/OBP-711>.
- [39] Dutkiewicz, S., S. Henson, C.B. Mouw, C. Rousseaux (2020) Chapter 8: Using Models to Inform Ocean Colour Science. In, *Synergy Between Ocean Colour and Biogeochemical/Ecosystem Models*. Dutkiewicz, S. (ed.), IOCCG Report Series, No. 19, International Ocean Color Coordinating Group, Dartmouth, Canada. <http://dx.doi.org/10.25607/OBP-711>.
- [38] Dutkiewicz, S., M. Baird, S. Ciavatta, S. Henson, A. Hickman, C.B. Mouw, C. Rousseaux, C. Stock (2020) Chapter 9: Summary and Recommendations. In, *Synergy Between Ocean Colour and Biogeochemical/Ecosystem Models*. Dutkiewicz, S. (ed.), IOCCG Report Series, No. 19, International Ocean Color Coordinating Group, Dartmouth, Canada. <http://dx.doi.org/10.25607/OBP-711>.
- 2019 [37] Miksis-Olds, J.L., D.V. Harrison, C.B. Mouw (2019) Interpreting Fin Whale Call Behavior in the Context of Environmental Conditions. *Aquatic Mammals*, 45(6): 691-705, DOI: <https://doi.org/10.1578/AM.45.6.2019.691>.
- [36] Mouw, C.B., †A. Ciochetto, and J.A. Yoder (2019) A Satellite Assessment of Environmental Controls of Phytoplankton Community Size Structure. *Global Biogeochemical Cycles*. 33, 540-558, <https://doi.org/10.1029/2018GB006118>.
- [35] Smith, L. P. Cornillon, D. Rudnickas, C.B. Mouw (2019) Evidence of Environmental Changes Caused by Chinese Island Building. *Nature Scientific Reports*. 9, 5295, <https://doi.org/10.1038/s41598-019-41659-3>. (Top 100 downloaded articles of 2019)
- [34] **Grunert, B.K., C.B. Mouw, †A.B. Ciochetto (2019) Deriving inherent optical properties from decomposition of hyperspectral non-water absorption. *Remote Sensing of Environment*. 225, 193-206, <https://doi.org/10.1016/j.rse.2019.03.004>.

- 2018 [33] Mouw, C.B., S. Clem, S. Legg, and J. Stockard (2018) Meeting Mentoring Needs in Physical Oceanography: An Evaluation of the Impact of MPOWIR. *Oceanography*. 31(4), 171–179, <https://doi.org/10.5670/oceanog.2018.405>.
- [32] Wang, G., Z.P. Lee, C.B. Mouw (2018) Concentrations of multiple phytoplankton pigments in the global oceans obtained from satellite ocean color measurements with MERIS. *Applied Sciences*. 8(12), 2678, <https://doi.org/10.3390/app8122678>.
- [31] ^{**}Grunert, B., C.B. Mouw, [†]A. Ciochetto (2018) Characterizing CDOM Spectral Variability Across Diverse Regions and Spectral Ranges. *Global Biogeochemical Cycles*. 32, DOI: 10.1002/2017GB005756.
- [30] Friedland, K.D., C.B. Mouw, R.G. Asch, A. Sofia, A. Ferreira, S. Henson, K.J.W. Hyde, R.E. Morse, A.C. Thomas, D.C. Brady (2018) Phenology and time series trends of the dominant seasonal phytoplankton bloom across global scales. *Global Ecology and Biogeography*, 00: 1-19, DOI: 10.1111/geb.12717.
- [29] Muller-Karger, F.E., E. Hestir, C. Ade, K. Turpie, D. Roberts, D. Siegel, R. Miller, D. Humm, N. Izenberg, M. Keller, F. Morgan, R. Frouin, A. Dekker, R. Gardner, J. Goodman, B. Schaeffer, B. Franz, N. Pahlevan, A. G. Mannino, J. A. Concha, S. G. Ackleson, K. Cavanaugh, A. Romanou, M. Tzortziou, E. Boss, R. Pavlick, D. Schimel, A. Freeman, C. S. Rousseaux, J. Dunne, M. C. Long, E. Klein, G. A. McKinley, J. Goes, R. Letelier, M. Cavanaugh, M. Roffer, A. Bracher, K. R. Arrigo, H. Dierssen, X. Zhang, F. Davis, B. Best, R. Guralnick, J. Moisan, H. M. Sosik, , R. Kudela, C. B. Mouw, A. Barnard, S. Palacios, C. Roesler, E. Drakou, W. Appeltans, W. Jetz (2018) Satellite Sensor Requirements for Monitoring Essential Biodiversity Variables of Coastal Ecosystems, *Ecological Applications*. DOI: 10.1002/eap.1682.
- [28] Hasan, M., C.B. Mouw, A. Jutla, A.S. Akanda (2018) Quantification of rotavirus diarrheal risk due to hydroclimatic extremes over South Asia: Prospect of satellite-based observations in detecting outbreaks. *GeoHealth*, 2, DOI: 10.1002/2017GH000101.
- 2017 [27] Wang, G., Z.P. Lee, C.B. Mouw (2017) Multi-spectral remote sensing of phytoplankton pigment absorption properties in cyanobacteria bloom waters: a regional example in the western basin of Lake Erie. *Remote Sensing*, 9(12), 1309, DOI: 10.3390/rs9121309.
- [26] Moore, T., C.B. Mouw, J. Sullivan, M. Twardowski, A. Burtner, [†]A. Ciochetto, M. McFarland, A. Nayak, D. Paladino, N. Stockley, T. H. Johengen, ^{*}A. Yu, S. Ruberg, and A. Weidemann (2017) Bio-optical properties of cyanobacteria blooms in western Lake Erie. *Frontiers in Marine Science*, 4:300, DOI: 10.3389/fmars.2017.00300.
- [25] Gloege, L., G. A. McKinley, C.B. Mouw, [†]A. Ciochetto (2017) Global Evaluation of Particulate Organic Carbon Flux Parameterization and Implications for Atmospheric pCO₂. *Global Biogeochemical Cycles*, 31, DOI: 10.1002/2016GB005535.
- [24] Mouw, C.B., [†]A. Ciochetto, ^{**}B. Grunert, and ^{**}A. Yu (2017) Expanding Understanding of Optical Variability in Lake Superior with a four-year dataset. *Earth System Science Data*, 9, 497-509, DOI: 10.5194/essd-9-497-2017.
- [23] Bracher, A. H. Bouman, R. Brewin, A. Bricaud, V. Brotas, A. M. Ciotti, L. Clementson, E. Devred, A. DiCicco, S. Dutkiewicz, N. Hardman-Mountford, A. Hickmann, M. Hieronymi, T. Hirata, S. Loza, C. B. Mouw, E. Organelli, D. Raitzos, S. Sathyendranath, J. Uitz, M. Vogt, A. Wolanin (2017) Obtaining Phytoplankton Diversity from Ocean Color: A Scientific Roadmap for Future Development. *Frontiers in Marine Science*, 4:55, DOI: 10.3389/fmars.2017.00055.
Included in: Martinez-Vicente, V., Bracher, A., Ramon, D., Sathyendranath, S., Kutser, T., eds. (2020). Colour and Light in the Ocean. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88963-421-7
- [22] Mouw, C.B., N. Hardman-Mountford, S. Alvain, A. Bracher, R. Brewin, A. Bricaud, A. Ciotti, E. Devred, A. Fujiwara, T. Hirata, T. Hirawake, T. Kostadinov, S. Roy, J. Uitz (2017) A Consumer's Guide to Satellite Remote Sensing of Phytoplankton Groups in the Global Ocean, *Frontiers in Marine Science*, 4:41, DOI: 10.3389/fmars.2017.00041.

Included in: Martinez-Vicente, V., Bracher, A., Ramon, D., Sathyendranath, S., Kutser, T., eds. (2020). Colour and Light in the Ocean. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88963-421-7

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- [20] Salisbury, J., C. Davis, A. Erb, C. Hu, C. Gatebe, C. Jordan, Z.P. Lee, A. Mannino, C.B. Mouw, C. Schaaf, B. Schaeffer, M. Tzortziou, (2017) Coastal observations from a New Vantage Point. *EOS*, 98, 1, 20-25, DOI: 1029/2016EO062707.
- 2016 [19] Mouw, C.B., †A. Barnett, G.A. McKinley, L. Gloege, and D. Pilcher (2016) Phytoplankton Size Impact on Export Flux in the Global Ocean, *Global Biogeochemical Cycles*, 30, DOI: 10.1002/2015GB005355.
- [18] Mouw, C.B., †A. Barnett, G.A. McKinley, L. Gloege, and D. Pilcher (2016) Global Ocean Particulate Organic Carbon Flux Merged with Satellite Parameters. *Earth System Science Data*, 8: 531-541, DOI: 10.5194/essd-8-531-2016.
- 2015 [17] *Trochta, J.T., C.B. Mouw, and T. Moore (2015) Remote sensing of physical cycles in Lake Superior using a spatial-temporal analysis of optical water typologies. *Remote Sensing of Environment*, 171: 149-161, DOI: 10.1016/j.rse.2015.10.008.
- [16] Dutkiewicz, S., A.E. Hickman, O. Jahn, W.W. Gregg, C.B. Mouw, M. Follows (2015) Capturing optically important constituents and properties in a marine biogeochemical and ecosystem model, *Biogeosciences*, 12: 4447-4481, DOI: 10.5194/bg-12-4447-2015.
- [15] Mouw, C.B., S. Greb, D. Aurin, P. DiGiacomo, Z.-P. Lee, M. Twardowski, C. Binding, C. Hu, R. Ma, T. Moore, W. Moses, and S. Craig (2015) Aquatic color radiometry remote sensing of coastal and inland waters: Challenges and recommendations for future satellite missions. *Remote Sensing of Environment*, 160: 15-30, DOI: 10.1016/j.rse.2015.02.001.
- [14] Bracher, A., N. Hardman-Mountford, T. Hirata, S. Bernard, R. Brewin, A. Bricaud, V. Brotas, A. Chase, A. Ciotti, J.-K. Choi, L. Clementson, E. Devred, P. DiGiacomo, C. Dupouy, W. Kim, T. Kostadinov, E. Kwiatkowska, S. Lavender, T. Moisan, C.B. Mouw, S. Son, H. Sosik, J. Uitz, J. Werdell, G. Zheng (2015) Phytoplankton Composition from Space: towards a validation strategy for satellite algorithms, NASA-TM-2015-217528, 40 pp. Greenbelt, MD: NASA Goddard Space Flight Center. (http://www.ioccg.org/groups/PFT-TM_2015-217528_01-22-15.pdf)
- 2014 [13] Clem, S., S. Legg, S. Lozier, and C.B. Mouw (2014) The impact of MPOWIR – A decade of investing in mentoring women in physical oceanography. *Oceanography*, 27(4) supplement: 39-48, DOI: 10.5670/oceanog.2014.113.
- [12] Brewin, R., S. Sathyendranath, A. Bricaud, A. Ciotti, E. Devred, T. Hirata, T. Kostadinov, H. Loisel, C.B. Mouw, and J. Uitz. (2014) Chapter 4. Detection of phytoplankton size structure by remote sensing, In, *Phytoplankton Functional Types from Space*. Sathyendranath, S. (Ed.), *Reports of the International Ocean Color Coordinating Group*, No. 15, IOCCG, Dartmouth, Canada. <http://dx.doi.org/10.25607/OBP-106>.
- [11] Sathyendranath, S., H. Sosik, J. Aiken, S. Alvain, R. Barlow, L. Clementson, N. Hardman-Mountford, T. Hirata, J. Morales, A. Nair, C.B. Mouw and V. Stuart, Chapter 1. General Introduction. (2014) In, *Phytoplankton Functional Types from Space*. Sathyendranath, S. (Ed.), *Reports of the International Ocean Color Coordinating Group*, No. 15, IOCCG, Dartmouth, Canada. <http://dx.doi.org/10.25607/OBP-106>.
- [10] D'Sa, E. J., J.I. Goes, H. Gomes, & C.B. Mouw (2014) Absorption and fluorescence properties of the eastern Bering Sea in the summer with special reference to the influence of a Cold Pool. *Biogeosciences*, 11, 3225–3244. DOI: 10.5194/bg-11-3225-2014.

- 2013 [9] Mouw, C.B., **H. Chen, G.A. McKinley, S. Effler, D. O'Donnell, M.G. Perkins, C. Strait (2013) Evaluation and optimization of bio-optical inversion algorithms for remote sensing of Lake Superior's optical properties, *J. Geophysical Research*, 118, 1696-1714, DOI: 10.1002/2011JC007690.
- [8] Naik, P., E.J. D'Sa, H. Gomes, J.I. Goés, and C.B. Mouw (2013) Light absorption properties in southeastern Bering Sea during July 2008: analysis, parameterization and absorption budget, *Remote Sensing of Environment* 134, 120-134, DOI: 10.1016/j.rse.2013.03.004.
- [7] Wang, J., H. Hu, J. Goes, J. Miksis-Olds, C.B. Mouw, E. D'Sa, H. Gomes, D.R. Wang, K. Mizobata, S. Saitoh, L. Luo (2013) A modeling study of seasonal variations of sea ice and plankton in the Bering and Chukchi Seas during 2007-2008, *J. Geophysical Research*, 118, DOI: 10.1029/2012JC008322.
- 2012 [6] Mouw, C.B. and S. Greb (2012) Workshop for Remote Sensing of Coastal and Inland Water; Madison, Wisconsin, 20-22 June 2012, *EOS* 93(39): 375, DOI: 10.1029/2012EO390006.
- [5] Mouw, C.B., J.A. Yoder, and S.C. Doney (2012) Impact of phytoplankton community size on a linked global optical and ecosystem model, *J. Marine Systems*, 89: 61-75, DOI: 10.1016/j.jmarsys.2011.08.002.
- 2010 [4] Mouw, C.B. and J.A. Yoder (2010) Optical determination of phytoplankton size composition from & prior global SeaWiFS imagery. *J. Geophysical Research*, 115, C12018, DOI: 10.1029/2010JC006337.
- [3] Martini, K., E. Frajka-Williams, and C.B. Mouw, (2009) The Pattullo Conference: Building Community Through Mentoring. *Oceanography* 22(1): 180-183, DOI: 10.5670/oceanog.2009.26.
- [2] Mouw, C.B. and J.A. Yoder (2005) Primary production calculations in the Mid-Atlantic Bight, including effects of phytoplankton community size structure. *Limnology and Oceanography* 50(4): 1232-1243.
- [1] Fahnenstiel, G. L., C. Beckmann, S. E. Lohrenz, D. F. Millie, O. M. E. Schofield, and M. J. McCormick (2002) Standard Niskin and Van Dorn bottles inhibit phytoplankton photosynthesis in Lake Michigan. *Verh. Internat. Verein. Limnol.*, 28(1): 376-380.

DATA SETS

- [8] Casey K.A., C.S. Rousseaux, W. Gregg, E. Boss, A. Chase, S. Craig, C.B. Mouw, R.A. Reynolds, D. Stramski, S. Ackleson, A. Bricaud, B. Schaeffer, M.R. Lewis, S. Maritorea, (2019) High spectral resolution in situ datasets of aquatic inherent and apparent optical properties. *PANGAEA*, <https://doi.pangaea.de/10.1594/PANGAEA.902230>
- [7] Mouw, C.B., †A. Ciochetto, **J. Carney, **K. Turner, *C. Jenkins. Imaging Flow CytoBot at the Graduate School of Oceanography, University of Rhode Island dock, <http://phyto-optics.gso.uri.edu:8000>
- [6] Mouw, C.B., †A. Ciochetto, J.A. Yoder (2018) OC-CCI Monthly Global 4 km Microplankton Fraction, doi:10.1594/PANGAEA.892211.
- [5] Mouw, C.B., †A. Ciochetto, **B. Grunert, and **A. Yu (2017) LakeSuperior. NASA SeaWiFS Bio-optical Storage System (SeaBASS), NASA. <https://seabass.gsfc.nasa.gov/archive/URI/Mouw/LakeSuperior/>.
- [4] Mouw, C.B., †A. Barnett, G.A. McKinley, L. Gloege, and D. Pilcher (2016) Global Ocean Particulate Organic Carbon Flux Merged with Satellite Parameters, doi:10.1594/PANGAEA.855600.
- [3] Mouw, C.B., †A. Ciochetto, T.S. Moore, M. Twardowski, J. Sullivan, **A. Yu (2014) URI_Lake_Erie_2013. NASA SeaWiFS Bio-optical Storage System (SeaBASS), NASA. https://seabass.gsfc.nasa.gov/archive/URI/Mouw/NIH-NSF_Lake_Erie/URI_Lake_Erie_2014/archive.
- [2] Mouw, C.B., †A. Ciochetto, T.S. Moore, M. Twardowski, J. Sullivan, **A. Yu (2013) URI_Lake_Erie_2013. NASA SeaWiFS Bio-optical Storage System (SeaBASS), NASA. https://seabass.gsfc.nasa.gov/archive/URI/Mouw/NIH-NSF_Lake_Erie/URI_Lake_Erie_2013/archive.
- [1] Mouw, C.B., J.A. Yoder (2010) SeaWiFS (version R2010.0) Monthly Global 9 km Microplankton Fraction, doi:10.1594/PANGAEA.860474.

CODE

[3] **Sonnet, V., L. Guidi, C.B. Mouw, G. Puggioni, S.-D. Atyata (2021) Morphological Analysis of (Phyto)Plankton Imagery (MAPI). <https://github.com/VirginieSonnet/mapi>

[2] **Sonnet, V., L. Guidi, C.B. Mouw, G. Puggioni, S.-D. Atyata (2021) Subsampling of Plankton Imagery Datasets and Reprojection in a morphospace (SPIDR). <https://github.com/VirginieSonnet/spidr>

[1] **Grunert, B.K., C.B. Mouw, †A.B. Ciochetto (2018) DAISEA - Derivative Analysis and Iterative Spectral Evaluation of Absorption. doi:10.5281/zenodo.1306817.

FUNDING**EXTERNAL AWARDED**

[25] Mouw, C.B. (PI), M. Behl (Co-I) “Collaborative Research: Enhancing MPOWIR to Build a Diverse and Inclusive Oceanography Workforce,” NSF Physical Oceanography, \$728,684 (total), \$581,662 (Mouw @URI), 4/1/2022 – 3/31/2026.

[24] Mouw, C.B. (PI) “Environmental Triggers of HAB Blooms and Toxin Expression in Narragansett Bay, RI”, Rhode Island Sea Grant, \$374,998 (total), 2/1/2022 – 1/31/2024.

[23] Mouw, C.B. (PI), M. Behl (Co-I) “MPOWIR: early-career mentoring for women and non-binary physical oceanographers – link to NASA labs,” NASA Physical Oceanography, \$122,414 (total), 10/1/2021 – 9/30/2025.

[22] Greb, S. (U. Wisconsin-Madison) and C.B. Mouw (Co-PI) “Workshop on the Validation of Satellite-derived Optical and Water Quality Parameters for Coastal and Inland Waters,” NASA Topical Workshops, Symposia, and Conferences, \$52,354 (total), 1/1/2020 – 12/31/2022.

[21] Mouw, C.B. (PI), S. Legg (co-PI, Princeton U) “Continued Mentoring of Junior Women in Physical Oceanography: Link to NASA Labs”, NASA Physical Oceanography, \$86,930 (total and Mouw @URI), 10/1/2018 – 9/30/2020.

[20] Hyde, K. (NOAA NMFS), C.B. Mouw (Co-I), R. Morse (NOAA NMFS), “Optimization of phytoplankton functional type algorithms for VIIRS ocean color data in the Northeast U.S. Continental Ecosystem”, NOAA Joint Polar Satellite System Proving Ground and Risk Reduction Program, \$453,207 (total), \$299,970 (Mouw @ URI), 6/1/2018 – 5/31/2021. \$81,000 supplement (Mouw @ URI)

[19] Mouw, C.B. (PI), S. Legg (co-PI, Princeton U.) “Further Continuity and Enhancement of MPOWIR,” NSF Physical Oceanography, \$511,544 (total), \$406,222 (Mouw @ URI), 4/1/2018 – 3/1/2022.

[18] Mouw, C.B. (PI) and M. Omand (U. Rhode Island) “Cells to Satellite: Imaging Rhode Island Harmful Algal Blooms,” Rhode Island Sea Grant, \$198,581 (total), \$134,016 (Mouw @ URI), 2/1/2018 – 1/31/2020.

[17] Dutkiewicz, S. (MIT), C.B. Mouw (Co-I), M. Follows (MIT), “Assessing Ecosystem Vulnerability to Climate Change through Optics, Imagery and Models”, NASA Ocean Biology and Biogeochemistry, \$743,668 (total), \$249,529 (Mouw @ URI), 08/23/2016 – 08/24/2020, [NNX16AR47G].

[16] Mouw, C.B. (PI) Presidential Early Career Award for Scientists and Engineers (PECASE), NASA, \$200,000 (total), \$200,000 (Mouw @ URI), 1/1/2017 – 12/31/2018, [NNX14AB80G Supplement].

- [15] Lozier, S. (Duke U.), S. Legg (Princeton U.), S. Clem (Duke U.), C.B. Mouw (Collaborator), “Mentoring junior women in physical oceanography: link to NASA labs”, NASA Topical Workshops, Symposia and Conferences, \$27,931 (total), 4/1/2016 – 3/31/2018.
- [14] Moore, T.S. (U New Hampshire), Ruberg, S. (NOAA GLERL), Johengen, T. (NOAA GLERL), C.B. Mouw (Collaborator), “Integrating autonomous field observations with operational remote sensing NOAA products for improving the detection and prediction of harmful algal blooms in Lake Erie” NOAA, \$5,000 (Mouw @ URI), 11/20/16-11/19/18.
- [13] Legg, S. (Princeton U.) and C.B. Mouw (Co-PI), “Continuation and Enhancement of MPOWIR”, NSF Physical Oceanography, \$430,578 (total), \$29,511 (URI), \$53,228 (Mouw @ MTU), 4/1/2014 – 3/31/2018, [OCE-1356212].
- [12] Mouw, C.B. (PI), S. Effler (Upstate Freshwater Institute), Z.P. Lee (U. Massachusetts-Boston), “Parameterizing spectral characteristics of optically active constituents in inland water for improved satellite retrievals”, NASA Remote Sensing of Water Quality, \$667,440 (total), \$123,946 (Mouw @ URI), \$180,932 (Mouw @ MTU) 1/1/2014 – 12/31/2017, [NNX14AB80G].
- [11] Follows, M. (MIT), S. Dutkiewicz (MIT), C. B. Mouw (Co-PI). “Interpreting ecological variability using remotely observed optical properties and ocean models”, NASA Ocean Biology and Biogeochemistry, \$804,014 (total), \$20,950 (Mouw @ URI), \$231,837 (Mouw @ MTU) 11/15/2012 – 11/14/2017, [NNX13AC34G].
- [10] Mouw, C.B. (PI) “Extraordinary Ice on Lake Superior – field observations”, NASA Rapid Response, \$41,494 (total), \$41,494 (Mouw @ MTU) 7/1/2014 – 12/2/2016, [NNX14AB80G Supplement].
- [9] Mouw, C.B. (PI), J. Goes (Columbia U.), H. Gomes (Columbia U.), E. D’Sa (Louisiana State U.), J. Miksis-Olds (Pennsylvania State U.), J. Wang (NOAA GLERL), Supplement to: Implications of changing sea ice on phytoplankton and zooplankton biomass and community structure in the Bering Sea, NASA Interdisciplinary Research in Earth Science, \$286,946 (total), \$80,137 (Mouw @ MTU), 6/1/2014 – 7/15/2016, [NNX10AP10G Supplement].
- [8] Moore, T. (U. New Hampshire), C.B. Mouw (Co-I), M. Twardowski (Harbor Branch Oceanographic Inst.) and J. Sullivan (Harbor Branch Oceanographic Inst.) “Development of novel detection and prediction algorithms for *Microcystis* bloom events in the Great Lakes based on remotely sensed data, in-situ measurements, and ecological niche modeling” NIH and NSF Oceans, Great Lakes and Human Health, \$627,655 (total), \$91,937 (Mouw @ MTU), 9/1/2012 – 2/28/2016, [1R01ES021929-01, OCE-1313783].
- [7] Mouw, C.B. (PI), S. Greb (WI DNR), P. DiGiacomo (NOAA NESDIS), S. Hook (NASA JPL), C. Hu (U. South Florida), Z.P. Lee (U. Massachusetts-Boston), R. Morrison (U. New Hampshire), “Workshop for Remote Sensing of Coastal and Inland Waters” NASA Topical Workshops, Symposia and Conferences, \$29,999 (total), \$29,999 (Mouw @ U. Wisc.) 1/1/2012 – 12/31/2012, [NNX12AJ07G].
- [6] Miksis-Olds, J.L. (Pennsylvania State U.), S. Parks (Syracuse U.), D. Russell (Pennsylvania State U.) and C.B. Mouw (funded collaborator), “Ocean basin impact of ambient noise on marine mammal detectability, distribution, and acoustic communication.” ONR Young Investigator Program, \$510,000 (total), \$43,115 (Mouw @ U. Wisc.), 4/1/2011 – 12/31/2014, [N00014-11-1-0619].
- [5] Greb, S. (WI DNR), C.B. Mouw (Co-PI), and D. O’Donnell (Upstate Freshwater Institute), “Optical properties of Wisconsin lakes and their application to remote sensing of water quality: A pilot study”, Wisconsin Department of Natural Resources, \$29,457 (total), \$13,469 (Mouw @ U. Wisc.) 7/1/11 – 6/21/12.

[4] Mouw, C.B. (PI), S. Lohrenz (U. Massachusetts-Dartmouth), and Z.P. Lee (U. Massachusetts-Boston), “Optical variability and inversion algorithm performance in the Great Lakes in preparation for high quality satellite retrievals from GEO-CAPE”, NASA GEO-CAPE Fiscal Year 2011 Science Studies, \$79,689 (total), \$48,405 (Mouw @ U. Wisc.), 1/1/11 – 12/31/11, [NNX10AP10G Supplement].

[3] McKinley, G.A. (U. Wisconsin-Madison) and C.B. Mouw (Co-PI), “Connecting phytoplankton cell size to variability in the ocean carbon sink”, NASA Science of MODIS Aqua and Terra,” \$475,762 (total), \$180,410 (Mouw@ U. Wisc.) 11/1/2010 – 1/2/2015, [NNX11AD59G].

[2] Mouw, C.B. (PI), “Optical and biogeochemical remote sensing of inland lakes and the Great Lakes”, Wisconsin Department of Natural Resources, \$10,000 (total), \$10,000 (Mouw @ U. Wisc.) 5/1/2010 – 11/30/2010.

[1] Mouw, C.B. (PI), J. Goes (Columbia U.), H. Gomes (Columbia U.), E. D’Sa (Louisiana State U.), J. Miksis-Olds (Pennsylvania State U.), J. Wang (NOAA GLERL), “Implications of changing sea ice on phytoplankton and zooplankton biomass and community structure in the Bering Sea,” NASA Interdisciplinary Research in Earth Science, \$1,495,604 (total), \$284,074 (Mouw @ U. Wisc.) 8/10/2010 – 1/31/2014, [NNX10AP10G].

STUDENT FELLOWSHIPS MENTORED (AWARDED, \$426,054 cumulative)

[7] Sonnet, V. “Linking hyperspectral optical properties with morphology and taxonomy for improved phytoplankton composition discrimination” NASA Future Investigators in NASA Earth and Space Science and Technology, \$135,000, 9/1/2020 – 8/31/2023.

[6] Yu, A. “Assessing the spatial distribution and physical drivers of cyanobacterial blooms in Western Lake Erie”, Michigan Sea Grant Graduate Student Fellowship, \$82,754, 2/1/2016 – 1/31/2018.

[5] Grunert, B. “CDOM variability and its influence on phytoplankton distribution in a sub-Arctic Basin”, NASA Earth and Space Science Fellowship, \$105,000, 9/1/2015 – 8/31/2018.

[4] Yu, A. “Assessing the spatial distribution and physical drivers of cyanobacterial blooms in Western Lake Erie”, Michigan Space Grant Graduate Fellowship, \$5,000, 5/1/2015 – 4/30/2016.

[3] Grunert, B. “Impacts of physical drivers on phytoplankton community composition in the Bering Sea”, Michigan Space Grant Graduate Fellowship, \$5,000, 5/1/2014 – 4/30/2015.

[2] Trochta, J.T. “Remote sensing approach in observing environmental interannual variability in Lake Superior”, Michigan Technological University, Summer Undergraduate Research Fellowship (SURF), \$3,300, 5/1/2013 – 8/31/2013.

[1] Chen, H. “Impact of Mesoscale Eddies and Mode Water Circulation on Surface Chlorophyll and Phytoplankton Size Distribution in The North Atlantic”, NASA Earth and Space Science Fellowship, \$90,000, 9/1/2011 – 8/31/2014.

SELECTED SCIENCE PRESENTATIONS (LAST 5 YEARS)

Sept. 2021	NOAA Coastwatch Annual Science Meeting , Virtual Invited seminar, “Characterizing Phytoplankton Composition from Satellite and Particle Imagery on the U.S. Northeast Shelf”
Apr. 2021	Rhode Island Sea Grant Coastal State Discussion Webinar – Detecting the Next Harmful Algal Bloom, Virtual Invited seminar, “Continuous Imaging of Narragansett Bay Phytoplankton”
Mar. 2021	NOAA Atlantic Oceanographic and Meteorological Laboratory (AOML) , Virtual DIY Mentoring, Coaching and Career Development Series

- Invited seminar, “Mentoring Physical Oceanography Women to Increase Retention (MPOWIR): lessons from a decade of mentoring for improving retention of under-represented groups in oceanography”
- Mar. 2021 **University of Hawaii, Department of Oceanography**, Virtual
- Invited seminar, “Impact of MPOWIR and Environmental Drivers of Phytoplankton Communities”
- Oct. 2020 **EarthTalks seminar series, Earth and Environmental Systems Institute**, Pennsylvania State University, Virtual
- Invited seminar, “Mentoring Physical Oceanography Women to Increase Retention (MPOWIR): lessons from a decade of mentoring for improving retention of under-represented groups in oceanography”
- Oct. 2020 **Regional Association for Research on the Gulf of Maine**, Virtual
- Keynote talk, Lower trophic level response to climate change in the Gulf of Maine session, “Perspectives on Phytoplankton Composition from Satellite and Particle Imagery”
- Oct. 2019 **Alumni Achievement Award, Western Michigan University, Department of Biological Sciences**, Kalamazoo, MI
- Invited talk, “Cells to Satellites: Phytoplankton size impact in the global ocean”
- Jun. 2019 **Data Needs for Hyperspectral Detection of Algal Bloom Diversity Across the Globe**, Ostend, Belgium
- Invited talk, “Metrics for Measuring Algal Biodiversity”
- Apr. 2019 **International Ocean Colour Science Meeting**, Busan, South Korea
- Invited talk, “Challenges and recommendations for remote sensing of optically complex waters”
- Apr. 2019 **International Ocean Colour Science Meeting**, Busan, South Korea
- Invited talk, “Requirements for lab/field work and measurements necessary for phytoplankton functional type algorithm evaluation”
- June 2018 **University of Rhode Island, Graduate School of Oceanography, Dean’s Advisory Committee**, Narragansett, RI
- Invited talk, “Phytoplankton Composition: Cells to Satellites”
- Sept. 2017 **University of Connecticut, Marine Sciences Department**, Groton, CT
- Invited seminar, “Phytoplankton Community Size Structure – Environmental Controls and Export”
- Apr. 2017 **NOAA Ocean Color Coordinating Group (NOCCG)**, Virtual
- Invited webinar, “Global Shifts in Phytoplankton Community Size Structure – Connections to Export Flux”
- Feb. 2017 **University of Massachusetts-Boston, School for the Environment**, Boston, MA
- Invited talk, Phytoplankton Size in the Global Ocean: Variability and Impact on Export Flux”

CONTRIBUTED (** indicates advised graduate student co-author, * indicates advised undergraduate student co-author, † indicates supported laboratory staff; order of authorship indicates level of contribution)

- Feb. 2022 **Ocean Sciences Meeting**, Honolulu, HI
- Poster, Myer, P.K., R.P. Mason, Z.A. Baumann, C.B. Mouw, H.M. Sosik “Methylmercury bioaccumulation in plankton in the Northwest Atlantic Ocean”
- Feb. 2022 **Ocean Sciences Meeting**, Honolulu, HI
- Poster, ** Song, S., †A. Ciochetto, C.B. Mouw “Environmental drivers of phytoplankton community composition in the North Atlantic accessed with satellite imaging”
- Nov. 2021 **RARGOM Annual Science Meeting: The Future of the Gulf of Maine**, Virtual
- Talk, Brosnahan, M., Richlen, M., Beaudoin, D., Pathare, M., Fairclough, C., Andrews, E., Govostes, R., Batchelder, S., Mikulski, C., Doucette, G., Keafer, B., Sosik, H., Drapeau, S., Roesler, C., Mouw, C., Ward, D., Kritzer, J., Li, Y., Stumpf, R., Hubbard, K., Anderson, D., “NHABON-NE, a prototype model for a national HAB sensor network”
- Aug. 2021 **Summer Undergraduate Research Fellows in Oceanography Symposium**, Narragansett, RI
- Talk, *Wendover, V., C.B. Mouw, †A. Ciochetto, **V. Sonnet “Identifying environmental parameters responsible for the *pseudo-nitzschia* bloom in the Narragansett Bay”

- June 2021 **ASLO Aquatic Sciences Meeting**, Virtual
Poster, *Lober, J., C.B. Mouw, †A. Ciochetto, *Virginie Sonnet, **K. Turner, K. Hyde, R. Morse, “Relationships between hyperspectral absorption and phytoplankton morphological composition on the Northeast U.S. Continental Shelf using in-situ flowthrough spectroscopy and imaging flow cytometry”
- May 2021 **International Society for Applied Phycology Meeting**, Virtual
Talk, Brosnahan, M., M. Richlen, D. Beaudoin, M. Pathare, E. Andrews, R. Govostes, T. Mikulski, G. Doucette, B. Keafer, H. Sosik, S. Drapeau, C. Roesler, **C. Mouw**, D. Ward, J. Kritzer, K. Hubbard, D. M. Anderson, “NHABON-NE, an adaptive sensor network for real-time harmful algal bloom surveillance and data sharing”
- May 2021 **Second International Operational Satellite Oceanography Symposium**, Virtual
Poster, *Turner, K.J., K.J. Hyde, C.B. Mouw, R. Morse, †A.B. Ciochetto, “Regional SST-dependent abundance-based algorithm for estimating phytoplankton size structure from ocean color data on the Northeast U.S. continental shelf”
- Apr. 2021 **The Rhode Island Consortium for Coastal Ecology Assessment, Innovation and Modeling Annual Research Symposium**, Virtual
Poster, *Sonnet, V., L. Guidi, C.B. Mouw, S.-D. Ayata, “Phytoplankton Morphological Succession in Narragansett Bay”
- Dec. 2020 **AGU Fall Meeting**, Virtual
*Lober, J., *C.B. Mouw, †A. Ciochetto, **K.J. Turner, K. Hyde, “Phytoplankton composition and ocean color optical relationships on the Northeast U.S. Continental Shelf”
- Dec. 2020 **AGU Fall Meeting**, Virtual
Myer, P.K., R.P. Mason, Z.A. Baumann, C.B. Mouw “Constructing an Unprecedented Time Series to Explore the Major Factors Impacting Methylmercury Bioaccumulation in Coastal Plankton”
- Nov. 2020 **NOAA JPSS Proving Ground and Risk Reduction Oceans and Coasts Meeting**, Virtual
Mouw, C.B., K. Hyde, R. Morse, **K. Turner, †A. Ciochetto, *J. Lober, C. Melrose, “Optimization of phytoplankton functional type algorithms for VIIRS ocean color data in the Northeast U.S. Continental Shelf ecosystem”
- Aug 2020 **Summer Undergraduate Research Fellows in Oceanography Symposium**, Virtual
Talk, *Lober, J., C.B. Mouw, †A. Ciochetto, **K. Turner “Phytoplankton composition and ocean color optical relationships on the Northeast U.S. Continental Shelf”
- Aug 2020 **Summer Undergraduate Research Fellows in Oceanography Symposium**, Virtual
Talk, *Bowen, T., C.B. Mouw, †A. Ciochetto “Phytoplankton Imaging and Optics from the GSO Pier”
- Apr. 2020 **North Atlantic Chapter of Society of Environmental Toxicology and Chemistry Annual Meeting**, Avery Point, CT
Myer, P.K., R.P. Mason, Z.A. Baumann, C.B. Mouw, “Constructing an unprecedented time series to explore the major factors impacting methylmercury bioaccumulation in coastal plankton”
- Feb. 2020 **Ocean Sciences Meeting**, San Diego, CA
Talk, Legg, S., C.B. Mouw, S. Clem, “Mentoring Physical Oceanography Women to Increase Retention (MPOWIR): lessons from a decade of mentoring for improving retention of under-represented groups in oceanography”
- Feb. 2020 **Ocean Sciences Meeting**, San Diego, CA
Poster, **Carney, J., C.B. Mouw, †A. Ciochetto, J. Rines, “Optical and Environmental Signatures of *Cochlodinium polykrikoides* in Narragansett Bay, Rhode Island
- Feb. 2020 **Ocean Sciences Meeting**, San Diego, CA
Poster, **Sonnet, V., L. Guidi, C.B. Mouw, S.-D., Ayata, “Morphological diversity of phytoplankton: Identification of traits, morphological succession and periodicities from imagery in Narragansett Bay, U.S.”
- Feb. 2020 **Ocean Sciences Meeting**, San Diego, CA

- Feb. 2020 Poster, K.J.W. Hyde, M.J. Fogarty, C.B. Mouw, R. Morse, **K. Turner, †A. Ciochetto, V. Saba, “A 20-Year Analysis of Phytoplankton in the Northeast U.S. Continental Shelf Large Marine Ecosystem with Implications for Fisheries”
Ocean Sciences Meeting, San Diego, CA
- Feb. 2020 Poster, **K.J. Turner, K. Hyde, C.B. Mouw, R. Morse, †A. Ciochetto, “Refinement of Phytoplankton Functional Type Algorithms for VIIRS Ocean Color Data on the Northeast U.S. Continental Shelf”
Ocean Sciences Meeting, San Diego, CA
- Feb. 2020 Poster, Casey, K.A., C. S. Rousseaux, W. Gregg, E. Boss, A. Chase, S. Craig, C.B. Mouw, R. A. Reynolds, D. Stramski, S. Ackleson, A. Bricaud, B. Schaeffer, M.R. Lewis, S. Maritorena, “A global compilation of in situ aquatic high spectral resolution inherent and apparent optical property data for remote sensing applications”
Ocean Sciences Meeting, San Diego, CA
- July 2019 Poster, Benavides, M., S. Hallstrom, C.W. Evans, L. Potts, J. Granger, C. R. Tobias, C.B. Mouw, L. Riemann, P.H. Moisander “Dominance of heterotrophic N₂ fixation in a coastal estuary”
JPSS Proving Ground and Risk Reduction, Oceans and Coasts Initiative, Silver Spring, MD
- July 2019 Virtual talk, Hyde, K., C. Mouw, R. Morse, †A. Ciochetto, **K. Turner
“Optimization of phytoplankton function type algorithms for VIIRS ocean color data in the Northeast U.S. continental shelf ecosystem”
- Jun. 2019 **International Operational Satellite Oceanography Symposium**, College Park, MD
Poster, Hyde, K., S. Chavez, †A. Ciochetto, K. Dodge, S. Gaichais, S. Hardison, M. Fogarty, K. Friedland, S. Large, S. Lucey, R. Morse, C. B. Mouw, C. Orphanides, V. Saba, **K. Turner, “Applications of ocean color and SST data in fisheries science and management”
- Jun. 2019 **IMBeR Open Science Conference**, Brest, France
**Sonnet, V., S. Ayata, L. Guidi, C.B. Mouw, “Linking morphological characteristics and phytoplankton functional traits from continuous imaging”
- Apr. 2019 **C-AIM Annual Research Symposium**, Kingston, RI
Poster, †A. Ciochetto, Mouw. C.B., **J. Carney, **K. Turner, *C. Jenkins, “GSO dock Phytoplankton and Optics Observatory”
- Dec. 2018 **AGU Fall Meeting**, Washington, D.C.
Talk, Casey, K.A., C. S. Rousseaux, W. Gregg, E. Boss, A. Chase, C. B. Mouw, R. A. Reynolds, D. Stramski, S. Ackleson, A. Bricaud, B. Schaeffer, M.R. Lewis, S. Craig, S. Maritorena, “High spectral resolution datasets of in situ aquatic inherent and apparent optical properties”
- Dec. 2018 **AGU Fall Meeting**, Washington, D.C.
Talk, Legg, S., C.B. Mouw, S. Clem, “MPOWIR: evaluation of impacts and best practices after a decade of mentoring women in physical oceanography”
- Nov. 2018 **Imaging Flow Cytobot Users Workshop**, Falmouth, MA
Talk, Mouw. C.B. and †A. Ciochetto, **J. Carney, “Phytoplankton Distributions in Narragansett Bay, Rhode Island: Perspectives from an IFCB and Long-Term Survey”
- Oct. 2018 **C-AIM Annual Symposium**, Narragansett, RI
Mini-Talk, Mouw, C.B., †A. Ciochetto, *C. Jenkins, **K. Turner, **J. Carney “Continuous Observation of Phytoplankton Variability in Narragansett Bay”
- Oct. 2018 **State of Lake Superior Conference**, Houghton, MI
Poster, Meingast, K., E. Kane, C.B. Mouw, “Linking near-shore Lake Superior optical properties with DOM quality and quantity”
- Aug 2018 **Summer Undergraduate Research Fellows in Oceanography Symposium**, Narragansett, RI
Talk, *Alexander, C., C.B. Mouw, †A. Ciochetto “A Comparison of Phytoplankton Species Distributions at the Graduate School of Oceanography Dock and at the Long-term Plankton Survey Site using an Imaging FlowCytoBot”
- July 2018 **Summer Undergraduate Research Fellows Conference**, Kingston, RI
Poster, *Jenkins, C., C.B. Mouw, †A. Ciochetto, “Identifying Covariances Between Optical Data and Phytoplankton Community Composition”
- Oct. 2018 **Ocean Optics Conference**, Dubrovnik, Croatia

- June 2018 Poster, **Grunert, B., C.B. Mouw, †A. Ciochetto, “Deriving inherent optical properties from decomposition of hyperspectral non-water absorption”
IMBRSea Annual Symposium, Ghent, Belgium
- June 2018 Poster, **Sonnet, V., C.B. Mouw, †A. Ciochetto, “Continuous Phytoplankton Imaging and Optics”
Ocean Carbon and Biogeochemistry Workshop, Woods Hole, MA
- May 2018 Poster, Mouw, C.B., †A. Ciochetto, “A satellite perspective of environmental controls of phytoplankton community size structure”
Rhode Island Marine Fisheries Institute, University of Rhode Island and Rhode Island Department of Environmental Management, Narragansett, RI
- Apr. 2018 Talk, Mouw, C.B., “Real-time Phytoplankton in Narragansett Bay”
Coastal Ecology Assessment Innovation & Modeling (C-AIM) Symposium, Kingston, RI
- Feb. 2018 Poster, Mouw, C.B., †A. Ciochetto, “GSO Dock Phytoplankton and Optics Observatory”
Ocean Sciences, Portland, OR
- Feb. 2018 Talk, Mouw, C.B., †A. Ciochetto, “Environmental Controls of Phytoplankton Community Size Structure: A Satellite Perspective”
Ocean Sciences, Portland, OR
- Feb. 2018 Poster, **Yu, A., C.B. Mouw, T. Moore, “Assessing spatial and temporal effects of the Detroit River on algal bloom distribution in western Lake Erie”
Ocean Sciences, Portland, OR
- Feb. 2018 Poster, †Ciochetto, A., C.B. Mouw, S. Dutkiewicz, “Variability in 3D ecoregions from satellite remote sensing”
Ocean Sciences, Portland, OR
- Aug 2017 Poster, **Grunert, B., C.B. Mouw, K. Meingast, †A. Ciochetto, “Seeing molecules from space: How CDOM absorption influences remotely-sensed reflectance and satellite-derived estimates of CDOM composition”
Summer Undergraduate Research Fellows in Oceanography Symposium, Narragansett, RI
- Aug. 2017 Talk, *Turner, K., C.B. Mouw, †A. Ciochetto “Optics and phytoplankton in Narragansett Bay, RI”
Trait-based Approaches to Ocean Life, Bergen, Norway
- June 2017 Poster, Mouw, C.B., †A. Ciochetto, “A satellite perspective of global shifts in phytoplankton community size structure in response to environmental controls”
Ocean Carbon and Biogeochemistry Workshop, Woods Hole, MA
- June 2017 Poster, Mouw, C.B., †A. Ciochetto, “Global shifts in phytoplankton community size structure in response to environmental controls”
Ocean Carbon and Biogeochemistry Workshop, Woods Hole, MA
- May 2017 Poster, **Grunert, B. Mouw, C.B., †A. Ciochetto, “Optically estimating CDOM composition across diverse spectral ranges”
International Association of Great Lakes Research, Detroit, MI
- May 2017 Poster, **Yu, A., Mouw, C.B., Moore, T., “Evaluating the influence of the Detroit River on algal bloom distribution in western Lake Erie”
International Ocean Color Science Meeting, Lisbon, Portugal
- May 2017 Poster, Mouw, C.B., †A. Ciochetto, “Global shifts in phytoplankton community size structure in response to environmental controls”
International Ocean Color Science Meeting, Lisbon, Portugal
- Aug. 2017 Poster, **Grunert, B. C.B. Mouw, †A. Ciochetto, “Optically estimating CDOM composition across diverse spectral ranges”
10th International Carbon Dioxide Conference, Interlaken, Switzerland
- Feb. 2017 Poster, Gloege, L., G.A. McKinley, C.B. Mouw, †A. Ciochetto, “Constraining the Potential Influence of the Ocean Biological Pump on Atmospheric pCO₂”
ASLO Aquatic Sciences Meeting, Honolulu, HI
- Feb. 2017 Talk, Mouw, C.B., †A. Ciochetto, “Global shifts in phytoplankton community size structure in response to environmental controls”

- Oct. 2021 **Making the Most of your Mentoring Relationships**, Pattullo Conference, Warrenton, VA
Invited Presenter and facilitator
- May 2021 **Career Pathways Combining Education with Oceanography**, MPOWIR webinar
Organizer and Facilitator
- Apr. 2021 **Believing in Yourself, A Positive Prospective on Imposter Syndrome**, Society of Women in
Marine Science (SWMS), Virtual, Invited Presenter
- Mar. 2021 **Making the Most of your Mentoring Relationships**, University of Rhode Island, Graduate
School, Professional Development Seminar Series, Virtual, Invited Presenter
- Mar. 2021 **Mastering Your Mindset and Productivity**, University of Rhode Island, Department of Natural
Resources Science, Virtual, Invited Workshop Facilitator
- Feb. 2021 **The Value of Self-Promotion**, University of Rhode Island, Graduate School, Professional
Development Seminar Series, Virtual, Invited Presenter
- Feb. 2021 **Writing Effective Peer Reviews**, Northeastern Marine and Environmental Sciences Graduate
Students Association, Virtual, Invited Presenter
- Dec. 2020 **Writing Effective Peer Reviews**, Society for Women in Marine Science (SWMS) Annual
Symposium, Virtual, Invited Presenter
- Nov. 2020 **Oceanography Career Paths in Policy and Non-Governmental Organizations**, MPOWIR
webinar, Organizer and Facilitator
- Aug. 2020 **Resilience and adaptability in planning during times of uncertainty**, MPOWIR Virtual
Discussion Series, Discussion Co-Organizer and Co-Lead
- Jun. 2020 **Improving Support for BIPOC Oceanographers**, MPOWIR Virtual Discussion Series,
Discussion Co-Organizer and Co-Lead
- May 2020 **Career Planning during the COVID-19 Pandemic**, MPOWIR Virtual Discussion Series,
Discussion Co-Organizer and Co-Lead
- May 2020 **Equity and Inclusion in Virtual Meetings**, MPOWIR Virtual Discussion Series, Discussion Co-
Organizer and Co-Lead
- Apr. 2020 **Cultivating a Supportive Work Culture, from the current emergency into the future**,
MPOWIR Virtual Discussion Series, Discussion Co-Organizer and Co-Lead
- Apr. 2020 **Strategies for Remote Work**, MPOWIR Virtual Discussion Series, Discussion Co-Organizer
and Co-Lead
- Mar. 2020 **Productivity Management**, University of Rhode Island, Department of Natural Resources
Science, Kingston, RI - Workshop development and facilitation for course in Environmental
Leadership in Practice
- Mar. 2020 **Believing in Yourself, A Positive Approach to Countering Imposter Syndrome**, University of
Rhode Island, Graduate School, Kingston, RI, Content developer, presenter, and workshop
facilitator
- Feb. 2020 **Improve your Productivity – from Ambition to Action**, University of Rhode Island, Graduate
School, Kingston, RI, Content developer, presenter, and workshop facilitator
- Feb. 2020 **MPOWIR: Building an Inclusive Community in Oceanography – How we can all
contribute**, Ocean Sciences Town Hall, San Diego, CA, Chair
- Oct. 2019 **Building your Network and Getting the Most Out of Your Mentoring Relationships**,
MPOWIR Pattullo Conference, Warrenton, VA, Session content developer and organizer
- Jun. 2019 **Integrating Effective Information Research into General Oceanography (OCG 301)**,
University of Rhode Island, Kingston, RI, Presenter
- Dec. 2018 **Managing Productivity and Getting Writing Done**, MPOWIR webinar, Presenter and
Organizer
- May 2018 **Growing your Leadership Presence**, MPOWIR webinar, Organizer and Facilitator
- Apr. 2018 **Applying for Academic Jobs in Marine Science**, University of Rhode Island, Graduate School
of Oceanography, Narragansett, RI, Panelist
- Feb. 2018 **MPOWIR: Making the Most of Mentoring Relationships**, Ocean Sciences Town Hall,
Portland, OR, Chair and Presenter
- Dec. 2017 **Expanding your research connections, managing concurrent projects and growing your
collaborative network**, MPOWIR webinar, Organizer and facilitator

Nov. 2017	Increasing your Impact through Nonverbal Communication , University of Rhode Island, Graduate School, Kingston, RI, Content developer, presenter, and workshop facilitator
Oct. 2017	Getting the Most Out of Your Mentoring Relationships , University of Rhode Island, Graduate School, Kingston, RI, Content developer, presenter, and workshop facilitator
Oct. 2017	Building your Network and Getting the Most Out of Your Mentoring Relationships , MPOWIR Pattullo Conference, Warrenton, VA, Session content developer and organizer
Sept. 2017	Managing your Time, your Adviser and your Mentoring , University of Rhode Island, Graduate School, Kingston, RI, Graduate student orientation session chair and presenter
May 2017	Maintaining Momentum in your Research and Maximizing the Impact of your Work , MPOWIR webinar, Organizer and facilitator
Mar. 2017	Learning to Lead , University of Rhode Island, Graduate School, Kingston, RI, Content developer, presenter, and workshop facilitator
Feb. 2017	Improve your Productivity and Time Management , University of Rhode Island, Graduate School, Kingston, RI, Content developer, presenter, and workshop facilitator
Feb. 2016	MPOWIR – Past, present and future , Ocean Sciences Town Hall, New Orleans, LA, Chair and Organizer
Feb. 2014	Dual Careers: Challenges and Opportunities , Ocean Sciences Town Hall, Honolulu, HI, Chair and Organizer

SELECTED SERVICE

INTERNATIONAL

2020-2022	Review Editor , Frontiers in Remote Sensing, Multi- and Hyper- Spectral Imaging
Jun. 2020	Promotion Reviewer , Council for Scientific and Industrial Research (CSIR) employee for South Africa's National Research Foundation
2015 – 2019	International Ocean Colour Coordinating Group Working Group member , Ocean Colour Applications for Biogeochemical, Ecosystem and Climate Modeling
2009 – present	Manuscript Reviewer > 70 manuscripts reviewed in 28 different journals

NATIONAL

2017 – present	NASA, Earth Science Advisory Committee (https://science.nasa.gov/researchers/nac/science-advisory-committees/esac), appointed special government employee (non-compensated)
2018 – 2020	2020 Ocean Science Meeting , Program Planning Committee Member
2011 – 2012	NASA Workshop for Remote Sensing of Coastal & Inland Waters , Chair, Organizer, Host
2011 – 2016	NASA MODIS Science Team member
2010 – 2018	NASA GEO-CAPE Ocean Science and Interdisciplinary Science Working Group member
2010 – present	Proposal Review NASA (18), NSF (5), Sea/Space Grant (5), Belgian Sci. Policy Office (2), Nat. Geo. (1), NOAA (1), including graduate fellowship programs such as NSF GRFP and NASA FINESST

INSTITUTIONAL

2021	URI GSO Welcome & Community Connection – Organizer, mentoring session chair, speed connections lead
2021	Hiring Committee member, Graduate School Dean
2020-2021	Contributor, URI GSO-CELS AGU Bridge Program, increases opportunities for students from underrepresented populations to obtain graduate degrees and create a network of peers, mentors, and advisers to support and serve them before, during and after grad school.
2020	Representative, Remote Teaching and Learning Task Force (in response to COVID-19)
2019-2020	Hiring Committee member, Graduate School of Oceanography tenure-track faculty
2018-2019	Hiring Committee member, Department of Natural Resources Science tenure-track faculty in GIS
2017 – 2019	Graduate Writing Committee
Fall 2017	Hiring Committee, Coordinator, URI Superfund Research Program Center
2016 - 2019	Educational Policy Committee

2015-2016	Dual Career and Programs & Interventions matrix participant, ADVANCE Matrix Process for University Programs
2015-2016	Hiring Committee member, Department of Geological and Mining Engineering & Sciences departmental faculty hiring
Fall 2015	Faculty start-up and space data task force member, ADVANCE proposal planning team
Fall 2015	Dual Career advisory committee to the Provost
2014 – 2015	Lead, Departmental Undergraduate Curriculum Assessment
2014 – 2015	Earth, Planetary & Space Sciences Institute Advisory Council
2012 – 2016	Department of Geological and Mining Engineering & Sciences Graduate Committee
Fall 2013	Teaching Space Committee
2013 – 2015	Great Lakes Research Center, Executive Committee
March 2013	Summer Undergraduate Research Fellowship Proposal Reviewer
2012- 2013	Earth Systems Science Program, Organizer, and co-author of new program curriculum proposal
Spring 2013	Department of Geological and Mining Engineering & Sciences, Chair, Research staff hiring
Fall 2012	Great Lakes Research Center, Implementation Committee

SELECTED CONTINUED EDUCATION

Summer 2021	URI Inclusive Mentoring Certificate
Summer 2021	National Research Mentor Network (NRMN) certified mentor
Spring 2021	Advanced Safe Zone – Race and Ethnicity , allyship training for the LGBTQA+ community
Fall 2020	Safe Zone , allyship training for the LGBTQA+ community
2019 - 2020	Provost's Leadership Series , University of Rhode Island, Kingston, RI
Sept. 2018	Inclusive SciComm: A Symposium on Advancing Inclusive Public Engagement with Science , University of Rhode Island, Kingston, RI
July 2018	Advance Clinical Translational Research Mentor Training Program , University of Rhode Island, Kingston, RI
Spring 2018	High Impact Teaching Workshop: Teaching Effective Information Research , University of Rhode Island, Kingston, RI
Feb. 2018	COACHing Strong Women in the Art of Strategic Persuasion , Portland, OR
Nov. 2017	Women's Leadership Success in Higher Education Conference , Orlando, FL
Fall 2017	Body Language Trainer , Science of People (https://www.scienceofpeople.com/)
June 2016	Denice Denton Emerging Leaders Workshop , Madison, WI
June 2013	National Effective Teaching Conference , Atlanta, GA

PROFESSIONAL AFFILIATIONS

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