

Joanna K. York

School of Marine Science and Policy
University of Delaware
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PROFESSIONAL PREPARATION

Ph.D., 2006, Biology, Boston University

Dissertation: *A stable isotopic assessment of sources and assimilation of nitrogen by estuarine phytoplankton.*

B.A. with honors, 1997, Environmental Science, University of Virginia

APPOINTMENTS

Assistant Professor, 2017 to present

School of Marine Science and Policy, University of Delaware, Newark, DE

Research Assistant Professor, 2011- 2017

School of Marine Science and Policy, University of Delaware, Newark, DE

Research Scientist, 2009-2010

Biological Systems Engineering, Virginia Tech, Blacksburg, VA

Post Doctoral Associate, 2006 - 2009

Laboratory of George McManus, Department of Marine Sciences, University of Connecticut, Groton, CT

Research Assistant, 1999 - 2006

Laboratory of Ivan Valiela, Marine Program, Boston University, Woods Hole, MA

Research Assistant, 1997 - 1998

Sea Fisheries Institute, Gdynia, Poland

PUBLICATIONS *Indicates student author

*Torre, DM, KJ Coyne, KD Kroeger, and JK York. 2019. Phytoplankton Community Structure Response to Groundwater-borne nutrients in the Inland Bays, DE. *Marine Ecology Progress Series* DOI:10.3354/meps13012

*Yoshimura, KM, J York, and JF Biddle. 2018. Impacts of Salinity and Oxygen on Particle-Associated Microbial Communities in the Broadkill River, Lewes DE. *Frontiers in Marine Science* DOI: 10.3389/fmars.2018.00100

*Fischer, SJ, JK York, YG Voynova, and WJ Ullman. 2017. Distance-Based Mixing Models of $\delta^{15}\text{N}_{\text{NO}_3^-}$ and $\delta^{18}\text{O}_{\text{NO}_3^-}$ in a Marsh-lined Estuary with Multiple Distinct NO_3^- Sources (Murderkill Estuary, Delaware, USA). *Limnology and Oceanography* 62: 408-420

Kasper, JW, JM Denver, and JK York. 2015. Suburban groundwater quality as influenced by turfgrass and septic sources, Delmarva Peninsula, USA. *Journal of Environmental Quality* DOI: 10.2134/jeq2014.06.0280

York JK, GB McManus, W Kimmerer, AM Slaughter, and TR Ignoffo. 2013. Trophic links in the plankton in the low salinity zone of a large temperate estuary: top-down effects of introduced copepods. *Estuaries and Coasts* DOI: 10.1007/s12237-013 9698-9

- York JK, BA Costas, and GB McManus. 2011. Microzooplankton grazing in green water – results from two contrasting estuaries. *Estuaries and Coasts* 34:373–385
- York JK, G Tomasky, I Valiela and AE Giblin. 2010. Isotopic approach to determining the fate of ammonium regenerated from sediments in a eutrophic sub-estuary of Waquoit Bay, MA. *Estuaries and Coasts*. 33:1069–1079
- York JK, G Tomasky, I Valiela, and DJ Repeta. 2007. Stable isotopic detection of ammonium and nitrate assimilation by estuarine phytoplankton in the Waquoit Bay estuarine system. *Limnology and Oceanography* 52: 144-155
- Kroeger KD, ML Cole, JK York, and I Valiela. 2006. Nitrogen loads to estuaries from wastewater plumes: Modeling and isotopic approaches. *Ground Water* 44: 188-200
- McManus GB, JK York, W Kimmerer. 2007. Microzooplankton dynamics in the low salinity zone of the San Francisco Estuary. *Verhandlungen Internationale Vereinigung für theoretische und angewandte Limnologie (Proceedings of the 30th Congress of the International Association of Theoretical and Applied Limnology [SIL])*
- Valiela I, JL Bowen and JK York. 2001. Mangrove forests: One of the world's threatened major tropical environments. *BioScience* 51: 807-815
- York JK, Z Witek, S Labudda and S Ochocki. 2001. Comparison of primary production and pelagic community respiration rates in the coastal zone of the Gulf of Gdansk. *Oceanologia* 43: 365-370

Manuscripts in preparation *Indicates student author

- *Brooks, T.W., Kroeger, K.D., York, J.K., Michael, H.A. In preparation for *Limnology and Oceanography*. Direct measurement of submarine groundwater discharge and benthic fluxes of nutrients and trace metals using a novel oxygen-regulated seepage meter.

HONORS AND AWARDS , *Honors at UD

- *Excellence in Undergraduate Mentoring, 2018
 EPA STAR Graduate Fellowship 2003-2006
 Palmer-McLeod Graduate Fellowship, Boston University. 2002-2004
 National Estuarine Research Reserve Graduate Fellowship 2001-2004
 Humes Alumni Award, Boston University. 2000
 Presidential University Graduate Fellowship, Boston University. 1999-2000
 Kosciuszko Foundation Grant for research in Poland. 1997
 Raven Society Fellowship, University of Virginia, for research in Poland. 1997
 Dean's List, University of Virginia. All semesters
 Phi Beta Kappa

PROFESSIONAL MEMBERSHIPS

- American Geophysical Union
 Coastal and Estuarine Research Society
 Association for the Sciences of Limnology and Oceanography

TEACHING (since 2010)

MAST100	Marine Science Colloquium I	Fa 2010-2019
MAST101	Marine Science Colloquium II	Sp 2011-2019
MAST201	Marine Science Colloquium III	Fa 2012-2014

MAST301	Junior Marine Science Seminar	Sp 2011-2019
ENWC/MAST314	Comparative Terrestrial and Marine Ecology	Fa 2010-2019
MAST382	Introduction to Ocean Sciences	Fa 2018
MAST427	Marine Biology	Fa 2017, 2019
MAST492	Marine Environmental Case Studies	Sp 2018-2019

Graduate Advisees

As Lead Advisor (n=3)

student, degree, year, current position

Thomas (Wally) Brooks, MS, 2018, Research Technician at USGS, Woods Hole, MA

Dan Torre, MS, 2016, Environmental Chemist/Modeler at RPS Group, Rhode Island

Claudia Shuman, MS, 2014, McLane Environmental LLC, Princeton, NJ

As Committee Member (n=8)

student, degree, year, advisor

Yanfei Wang, PhD, anticipated 2020, Kathy Coyne

Maoli Vizcaino, MS 2019, Katharina Billups

Kristin Yoshimura, PhD, 2019, Jennifer Biddle

Andrew Caldwell, MS, 2018, Katharina Billups

Brandon Boyd, PhD, 2016, Chris Sommerfield

Jeff Flood, MS, 2016, George Parsons

Yanfei Wang, MS, 2016, Kathy Coyne

Sarah Fischer, MS 2014, Bill Ullman

Undergraduate Research Advisees (n=12)

student (institution, funding source), current position

Ashley Barnett (UD, research funds), Environmental Consulting Services, Middletown, DE

Emily Beale (UD, research funds)

Luke Campolo (UD, Summer Scholars), Programmer at Epic Healthcare Software, WI

Hannah Cooper (NC State University, research funds), current undergrad at NC State

Maggie Dolan (UD, research funds), current undergrad at UD

Will Gagne-Maynard (Carleton College, NSF-REU), PhD Program, University of Washington, Oceanography

Will Goldman (UD, Summer Scholars), earned MS, University of Delaware, Geography

Alexandra Good (UD), MS program, SMSP, UD

Erin Papke (UD, research funds)

Olivia Pleasanton (UD, research funds), current undergrad at UD

Eadoh Reshef (UD, Summer Scholars), PhD Program, Scripps Institution of Oceanography

Elisabeth Schlaudt (Furman College, NSF-REU), Peace Corps (Panama)

Jessica Vaccare (SUNY ESF, NSF-REU), MS Program, Louisiana State University

PRESENTATIONS AT CONFERENCES: ABSTRACTS AND POSTERS

***denotes student author**

York, JK, T Brooks, K Kroeger, and D Torre. Groundwater-borne nutrient fluxes to the Delaware Inland Bays. Coastal and Estuarine Research Federation, 2015, Portland, OR.

- Torre, D*, JK York, K Coyne, and K Kroeger. Phytoplankton community response to groundwater-borne nutrients in the Delaware Inland Bays. Coastal and Estuarine Research Federation, 2015, Portland, OR.
- Fischer, SJ*, W Ullman, and JK York. Seasonal patterns of $\delta^{15}\text{N}$ and $\delta^{18}\text{O}$ of NO_3^- in the Murderkill River Watershed and Estuary, DE. Coastal and Estuarine Research Federation 2013, San Diego, CA.
- Shuman, CR*, JK York, and K Kroeger. 2013. Tracing agriculturally derived nitrogen through groundwater into Delaware's Indian River Estuary. Coastal and Estuarine Research Federation, San Diego, CA.
- Shuman, CR*, and JK York. 2013. Tracing agriculturally-derived nitrogen through groundwater into Delaware's Indian River Estuary. Delaware Geological Survey Symposium, Newark, Delaware
- Gagne-Maynard, W*, JK York, and WJ Ullman. 2013. Determination of Nutrient Sources and Sinks within the Murderkill Estuary Using In-Situ Chemical Analysis and Nitrate Isotope Fractionation. ASLO 2013 Aquatic Sciences Meeting, New Orleans, LA.
- Fischer, SJ*, W Gagne-Maynard, WJ Ullman, and JK York. 2013. Seasonal patterns of $\delta^{15}\text{N}$ and $\delta^{18}\text{O}$ of NO_3^- in the Murderkill River Watershed and Estuary, DE. Partnership for the Delaware Estuary, Cape May, NJ.
- York, JK. 2012. Tracing land-derived nitrogen into the Delaware Inland Bays: a stable isotopic assessment. Coastal and Estuarine Research Federation. Mar del Plata, Argentina.
- Schoener, DM, GB McManus, J Tomaras, and JK York. 2010. Grazing and direct inorganic nitrogen uptake in a mixotrophic ciliate. In Proceedings of the American Geophysical Union. San Francisco, CA.
- York JK, BA Costas, and GB McManus. 2010. Microzooplankton grazing in green water – results from two contrasting estuaries. Ocean Sciences Meeting. Portland, OR.
- York, JK, G McManus, and W Kimmerer. 2007. Microzooplankton dynamics in the Upper San Francisco Estuary. In Conference Abstracts of the Estuarine Research Federation. Providence, RI.
- McManus, G, JK York, and W Kimmerer. 2007. Microzooplankton dynamics in the low salinity zone of the San Francisco Estuary. *Societas Internationalis Limnologiae*. Montreal, Canada
- York JK, I Valiela and DJ Repeta. 2005. Estuarine response to nitrogen loading: Comparison of Childs River, MA and Tijuana River, CA. In Conference Abstracts of the Estuarine Research Federation. Norfolk, VA.
- York JK, I Valiela and DJ Repeta. 2005. Stable isotopic assessment of phytoplankton nitrogen preferences in estuaries. *American Society of Limnology and Oceanography*. Santiago de Compostela, Spain.
- York JK and I Valiela. 2005. Determining primary producer N use by comparison of nitrogen isotopic patterns in Waquoit Bay, MA. New England Estuarine Research Society. Eastham, MA.
- York JK, I Valiela and DJ Repeta. 2004. Stable isotopic detection of ammonium and nitrate assimilation by estuarine phytoplankton. In Proceedings of the American Geophysical Union. San Francisco, CA.
- York JK, I Valiela and DJ Repeta. 2004. Does NH_4^+ or NO_3^- drive phytoplankton production? An isotopic assessment. In Proceedings of the American Society of Limnology and Oceanography. Honolulu, HI.

York JK and I Valiela. 2003. Isotopic signatures of regenerated ammonium: evidence for subsequent nitrification. In Conference Abstracts of the Estuarine Research Federation. Seattle, WA.

York JK, Z Witek, S Labudda and S Ochocki. 1998. Comparison of primary production and pelagic community respiration rates in the coastal zone of the Gulf of Gdansk. In: Book of Abstracts of the International Council for the Exploration of the Seas Brackish Water Ecosystems symposium. Helsinki, Finland.

PROFESSIONAL SERVICE

- Reviewer for: Aquatic Microbial Ecology, Biogeochemistry, Estuaries and Coasts, Estuarine Coastal and Shelf Science, Hydrobiologia, Journal of Plankton Research, Journal of Experimental Marine Biology and Ecology, Limnology and Oceanography, Marine Ecology Progress Series
- Panel Review, NSF OCE, 2019
- EPA STAR Graduate Fellowship Review Panel 2011, 2012, 2013
- NSF Graduate Research Fellowship Program (GRFP) Review Panel, 2015, 2016, 2017
- Oral Session Co-Chair, Coastal and Estuarine Research Federation Meeting, Providence, RI, November 2017
- Participant on Site Review Panel, Healthy Coastal Ecosystems Focus, Delaware Sea Grant, June 2015 and May 2019

SCHOOL OF MARINE SCIENCE AND POLICY (SMSP) SERVICE

- Chair, SMSP Undergraduate Curriculum Committee
- Director's Council
- Academic Program Review Committee, Fall 2018- Fall 2019
- Transfer Credit Coordinator

COLLEGE SERVICE

- CEOE Diversity Committee, May 2016 to present
- Review Committee for SMSP Director Mark Moline, Spring 2018
- Director of CEOE NSF-funded Research Experience for Undergraduates Program, 2015 to present
- Faculty Advisor to Earth, Ocean and Environment Club, a registered student organization at UD, Fall 2018 to present

UNIVERSITY SERVICE

- Chief Diversity Officer, representing CEOE, Fall 2016 to Spring 2017
- Member, Distinguished Scholars selection committee, Spring 2019

PUBLIC SERVICE

- Presenter at Coast Day, 2010-2014, 2018
- Advisor for high school science fair project, Charter School of Wilmington, 2012
- Member, Scientific and Technical Advisory Committee (STAC), Center for the Inland Bays, 2014-2016