Corday R. Selden, Ph.D.

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h-index: 7 | i10-index: 6
Updated 2023-09-19

EDUCATION

Doctor of Philosophy, Oceanography — 2015 - 2020
Old Dominion University

Bachelor of Science, Biology (Minor in Chemistry) — 2011 - 2014
Eckerd College

PROFESSIONAL EXPERIENCE

Presidential Postdoctoral Fellow — 2023 - present
Dept. Marine & Coastal Sciences, Rutgers University

Postdoctoral Associate — 2021 - 2023
ENIGMA Research Program (`www.enigma.rutgers.edu`), Rutgers University

Graduate Assistant — 2015 - 2020
Ocean and Earth Sciences Department, Old Dominion University

Biological Scientist — 2014 - 2015
Florida Fish and Wildlife Research Institute

Undergraduate Research Assistant — 2013 - 2014
Marine Sciences Department, Eckerd College

RESEARCH INTERESTS

BIOGEOCHEMICAL CYCLING, particularly marine nitrogen and carbon cycling with special focus on N_2 fixation; evolution of microbial metabolism; biosphere-geosphere interactions and feedbacks between aquatic ecosystems and global climate; cycling of bioessential trace elements and their isotopes; (isotope) metallomics

MANUSCRIPTS IN PREPARATION

[18] **Selden, C.R.**, Ganley, L., Isanta-Navarro, J., LaBrie, R., Peleg, O., Perry, D., Reich, H., Sasaki, M., Thibodeau, P. How ecosystems respond to climate change will change the climate. *In prep.* for *Global Change Biology*.

[17] Crider, K.$^{+}$, **Selden, C.R.**, Muglia, M., Tuo, S., Chappell, P.D. Seasonal dynamics of coastal diazotrophs near the Cape Hatteras front. *In prep.* for *Environmental Microbiology*. ($^{+}$mentee)

MANUSCRIPTS SUBMITTED/UNDER REVIEW

[16] **Selden, C.R.**, Schilling, K., Yee, N. Differential fractionation of Cu isotopes by common amino acid ligands in metalloproteins. *Scientific Reports*, submitted.

[15] **Selden, C.**, Mulholland, M., Clayton, S., Zhang, W., Macías-Tapia, A., Bernhardt, P., Chappell, P.D. Frontal mixing enhances diazotroph activity at the New England shelfbreak. *Global Biogeochemical Cycles*, in revision.

PEER-REVIEWED PUBLICATIONS

[14] Macías-Tapia, A., Mulholland, M.R., **Selden, C.R.**, Loftis, D. & Bernhardt, P. (2023). Five years 'Measuring the Muck': Evaluating interannual variability of nutrient loads from tidal flooding. *Estuaries & Coasts*. `https://doi.org/10.1007/s12237-023-01245-3`

[13] Shao, Z. *et al.* (2023). Version 2 of the global diazotroph database. *Earth System Science Data*, 15, p.3673-2709. https://doi.org/10.5194/essd-15-3673-2023

[12] **Selden, C.R.***, Einarsson, D.*, Lowry, K., Crider, K.$^{+}$, Pickart, R., Ashjian, C. & Chappell, P. D. (2022). Coastal upwelling enhances abundance of a symbiotic diazotroph (UCYN-A) and its host in the Arctic Ocean. *Frontiers in Marine Sciences*, 9:877562. http://doi.org/10.3389/fmars.2022.877562 (*co-first authors; $^{+}$mentee)

[11] Confesor, K.$^{+}$, **Selden, C.R.**, Powell, K., Donahue, L., Mellett, T., Caprara, S., Knapp, A., Buck, K., Chappell, P.D. (2022). Defining the realized niche of two major clades of *Trichodesmium*: A study on the West Florida Shelf. *Frontiers in Marine Science*, 9:821655. http://doi.org/10.3389/fmars.2022.821655 ($^{+}$undergraduate mentee)

[10] Amergian, K.E., Beckwith, S., Gfatter, G., **Selden, C.R.** & Hallock, P. (2022). Can areas of high alkalinity fresh-water discharge provide a potential refugia for marine calcifying organisms? *Journal of Foraminiferal Research*, 52(1), p. 60-73. https://doi.org/10.2113/gsjfr.52.1.60

[9] **Selden, C.R.**, Chappell, P.D., Clayton, S., Macías-Tapia, A., Bernhardt, P. & Mulholland, M. (2021). A coastal N_2 fixation hotspot at the Cape Hatteras front: Elucidating spatial heterogeneity in diazotroph activity via supervised machine learning. *Limnology & Oceanography*, 66(5), p. 1832-1849. https://doi.org/10.1002/lno.11727

[8] Macías-Tapia, A., Mulholland, M.R., **Selden, C.R.**, Loftis, D. & Bernhardt, P. (2021). Effects of tidal flooding on estuarine biogeochemistry: quantifying flood-driven nitrogen inputs in a lower Chesapeake Bay sub-tributary. *Water Research*, 201, 117329. https://doi.org/10.1016/j.watres.2021.117329

[7] Oliver, H., Zhang, W.G., Smith, W.O., Alatalo, P., Chappell, P.D., Hirzel, A., **Selden, C.R.**, Sosik, H.M., Stanley, R.H.R., Zhu, Y., & McGillicuddy, D.J. (2021). Diatom hotspots driven by western boundary current instability. *Geophysical Research Letters*, 48(11): e2020GL091943. https://doi.org/10.1029/2020GL091943

[6] **Selden, C.R.**, Mulholland, M., Bernhardt, P., Widner, B. & Jayakumar, A. (2021). Towards resolving disparate accounts of the extent and magnitude of nitrogen fixation in the Eastern Tropical South Pacific oxygen deficient zone. *Limnology & Oceanography*, 66(5): p. 1950-1960. https://doi.org/10.1002/lno.11735

[5] White, A., Granger, J., **Selden, C.R.**, Gradoville, M.R., Potts, L., Bourbonnais, A., Fulweiler, R.W., Knapp, A., Mohr, W., Moisander, P., Tobias, C., Wilson, S., Benavides, M., Bonnet, S., Mulholland, M. & Chang, B. (2020). A critical review of the $^{15}N_2$ tracer method to measure diazotrophic production in pelagic ecosystems. *Limnology & Oceanography: Methods*, 18(4), p. 129-147. https://doi.org/10.1002/lom3/10353

[4] **Selden, C.R.**, Mulholland, M., Bernhardt, P., Widner, B., Macías-Tapia, A., Ji, Q. & Jayakumar, A. (2019). Dinitrogen fixation across physico-chemical gradients of the Eastern Tropical North Pacific oxygen deficient zone. *Global Biogeochemical Cycles*, 33(9), p. 1187-1202. https://doi.org/10.1029/2019GB006242

[3] Mulholland, M., Bernhardt, P., Widner, B., **Selden, C.R.**, Chappell, D., Mannino, A., Hyde, K. & Clayton, S. (2019). High rates of N_2 fixation in temperate, western North Atlantic coastal waters expands the realm of marine N_2 fixation. *Global Biogeochemical Cycles*, 33(7), p. 826-840. https://doi.org/10.1029/2018GB006130

OTHER PUBLICATIONS

[2] **Selden, C.R.**, Blankmann, D., Falkowski, P.G. "Earth's metabolism: How proteins helped create our planet." A Teaching Topic Framework for the *International Microbiology Literacy Intiative*. K. Timmis [ed]. In press.

[1] Ghosh, A., Robinson, A., Chiapella, A., Bertolet, B., **Selden, C.R.**, Perry, D., Reich, H., Oleksy, I., Isanta-Navarro, J., Aho, K., Ganley, L., Soares, L., Heffernan, L., Peleg, O., Ramulifho, P., Thibodeau, P., Reis, P., Sasaki, M., Ray, N., Maher, R., LaBrie, R., Spier, S. (2022). Eco-DAS: an effective platform for developing professional collaborations among early career aquatic scientists. *Limnology & Oceanography Bulletin*. https://doi.org/10.1002/lob.10485

HONORS AND AWARDS — TOTAL: $307,200

Presidential Postdoctoral Fellowship, Rutgers University, $150,000 2023

Lee Entsminger Outstanding Ph.D. Dissertation Award, ODU College of Sciences, $500 2021

International Postdoctoral Fellowship, Ocean Frontiers Institute (Declined), $140,000 CAD 2020

Dorothy Brown Travel Scholarship, ODU Ocean and Earth Sciences Department (5x), $10,000 2016-2020

Zaneveld Endowed Research Scholarship, ODU Ocean and Earth Sciences Department $1,700 2016

Kelley Endowed Research Scholarship, ODU Ocean and Earth Sciences Department, $5,000 2016

TEACHING EXPERIENCE

Biological Oceanography: Water Column Ecosystems and Processes (MCS 520) Fall 2023
Co-instructor, Rutgers University

Astrobiology (EPS 225), Rutgers University Spring 2022
Guest lecturer on 'Photosynthesis: Evolution and biochemistry'

(Advanced) Biological Oceanography (OEAS 440/640) Teaching Assistant, ODU 2017 - 2020
Primary laboratory instructor for three semesters
Guest lecturer on 'Alternative metabolisms', 'Primary productivity'

Understanding Global Climate Change (OEAS 108N) Teaching Assistant, ODU 2018 - 2019
Primary laboratory instructor for two semesters
Guest lecturer on 'Global carbon cycling'

SERVICE

Manuscript reviewer: PNAS, Nature Sustainability, Nature Communications, ISME Journal, Limnology & Oceanography, L&O: Letters, Geophysical Research Letters, Journal of Geophysical Research: Biogeosciences, Frontiers in Marine Science, Journal of Plankton Research, Biogeochemistry, Applied and Environmental Microbiology

Conference convener:

- "Future-proofing isotope metallomics measurement science/services with medical needs and scalability requirements" (workshop at Goldschmidt Geochemistry Conference 2023)
- "Shelf-break frontal dynamics: integrating biological, biogeochemical and physical observations for a holistic view of ecosystem function" (session at Ocean Sciences Meeting 2022, primary chair)

Panels:

- Biosignature's Rolling Evaluation Panel, NASA Exobiology Program (Fall 2021, Executive Secretary)

University committees/organizations:

- Rutgers Marine and Coastal Sciences Diversity, Equity and Inclusion Committee (2021 - present)
- ODU College of Sciences Graduate Education Advisory Board (2019 - 2020)
- ODU Ocean and Earth Sciences Website Committee (2018 - 2020)
- ODU Graduate Student Organization (president, 2018 - 2019; member, 2015 - 2020)

Community working groups:

- Aquatic N_2 Fixation Research Coordination Network, `www.aquaticnfixation.com` (2023 - present)
- OCB N_2 Fixation Working Group, `www.us-ocb.org/n-fixation-working-group` (2018 - 2020)

RECENT OUTREACH AND BROADER IMPACTS

Chatham Public Library Speaker, 'Is it alive?', K-8 after-school science program April 2023

UNCG Education Dept. Speaker, 'What is science?', for *Elementary Science Methods* course, remote Feb. & June 2023

Moss Street Elementary School Speaker, 'Meet a Scientist', remote — Nov. 2022

Rutgers STEM Network Undergraduate mentor, New Brunswick, NJ — Fall 2022

UNCG Education Dept. Speaker, 'What is life?', for *Elementary Science Methods* course, remote — Oct. 2021

Virtual Teacher Professional Development Workshop Speaker, 'Astrobiology: The Science Behind the ENIGMA Project', remote — May 2021

'Measure the Muck' Community Science Organizer and volunteer coordinator, Norfolk VA — 2017 - 2021

National Ocean Sciences 'Blue Crab' Bowl Competition official, VA — 2017 - 2020

Graduate Workshop Series Organizer, Ocean & Earth Sciences Dept., ODU — 2018 - 2019

FIELD WORK AND OCEANOGRAPHIC RESEARCH CRUISES — TOTAL: 138 DAYS

RSS Discovery South Atlantic Subtropical Gyre to Southern Ocean (37 days), *upcoming* — Winter 2024

Jennette's Pier field station Outer Banks, NC (13 day trips), *research operations leader* — 2019 - 2020

R/V Miss Caroline Outer Banks, NC (1 day), *chief scientist* — Summer 2019

R/V Thomas G. Thompson New England shelf-break (2 weeks), *research group leader* — Summer 2019

R/V Ronald H. Brown New England shelf-break (2 weeks), *research group leader* — Summer 2019

R/V Weatherbird West Florida Shelf (4 days) — Spring 2019

R/V Rachel Carson Chesapeake Bay (1 day), *research group leader* — Summer 2018

R/V W. T. Hogarth West Florida Shelf (4 days) — Winter 2018

R/V Riptide Chesapeake Bay (1 day), *chief scientist* — Summer 2017

R/V Fay Slover Chesapeake Bay (4 day trips) — 2016 - 2017

R/V Hugh R. Sharp Mid-Atlantic Bight (2 weeks) — Summer 2016

R/V Ronald H. Brown Eastern Tropical North Pacific (3 weeks) — Spring 2016

Seagrass ecosystem survey Florida Gulf Coast (10 day trips) — Summer 2015

SEMINARS AND INVITED TALKS

LSU Oceanography and Coastal Sciences Department "Elucidating forces and feedbacks in Earth's biogeochemical cycles." — April 2023

Rutgers ENIGMA Annual Symposium "Experimental investigation of amino acid binding as a mechanism for fractionating metal stable isotopes." — May 2022

Rutgers ENIGMA Seminar Series "N_2 fixation in the modern ocean." — May 2021

Rutgers Marine & Coastal Sciences Department "Ocean physics as a driver of N_2 fixation on the continental shelf." — Mar. 2021

ODU Ocean & Earth Sciences Department "In the margins: Reconsidering the range and contribution of diazotrophs in nearshore environments." — Oct. 2020

Eckerd College Marine Sciences Department "Changes in benthic foraminifera abundance and sedimentary redox conditions after the Deepwater Horizon event." — Apr. 2014

CONTRIBUTED ABSTRACTS

**indicates (under)graduate mentee*

[40] **Selden, C.R.**, Schilling, K., Godfrey, L., Yee, N. Probing the mechanisms of biological metal isotope fractionation: Metal-binding amino acids commonly found in metalloproteins differentially fractionate Cu isotopes. Proposed oral presentation at Ocean Sciences Meeting, New Orleans, LA. February, 2024.

[39] Setta, S., **Selden, C.R.**, Jenkins, B., Dhyrman, S., Rynearson, T. The physiological and metabolic responses of cultured Hemiaulus-Richelia to exogenous nitrogen. Proposed oral presentation at Ocean Sciences Meeting, New Orleans, LA. February, 2024.

[38] Crider, K., **Selden, C.R.**, Mulholland, M., Muglia, M., Tuo, S., Chappell, P.D. Seasonal water mass interactions drive diazotroph community composition and nitrogen fixation at the Cape Hatteras front. Proposed oral presentation at Ocean Sciences Meeting, New Orleans, LA. February, 2024.

[37] **Selden, C.R.**, Schilling, K., Saunders, N., Basu, A., Yee, N. Applying artificial intelligence to investigate biological fractionation of metal isotopes. Oral presentation at Goldschmidt Conference, Lyon, France. July, 2023.

[36] Setta, S., **Selden, C.R.**, Dhyrman, S., Rynearson, T. Untangling the transcriptional response of a Diatom-Diazotroph Association to exogenous nitrogen. Poster presentation at Molecular Life of Diatoms Meeting, San Diego, CA. July, 2023.

[35] **Selden, C.R.**, Schilling, K., Basu, A., Yee, N. Experimental investigation of amino acid binding as a mechanism for fractionating metal stable isotopes. Oral presentation at Goldschmidt Conference, Honolulu, HI. July, 2022.

[34] **Selden, C.R.**, Schilling, K., Basu, A., Yee, N. Experimental investigation of amino acid binding as a mechanism for fractionating metal stable isotopes. Oral presentation at Northeast Geobiology Symposium, Cambridge, MA. April, 2022.

[33] **Selden, C.R.**, Chappell, P.D., Clayton, S., Einarsson, D.S., Macías-Tapia, A., Bernhardt, P., Crider, K.*, Mulholland, M. Ocean physics as a driver of nitrogen fixation at the shelf-break. Oral presentation at Ocean Sciences Meeting, Honolulu, HI. February, 2022. (Virtual)

[32] Confesor, K.*, **Selden, C.R.**, Knapp, A., Buck, K., Chappell, P.D. Defining the realized niche of the two major clades of *Trichodesmium*: a study on the West Florida Shelf. Oral presentation at Ocean Sciences Meeting, Honolulu, HI. February, 2022. (Virtual)

[31] Crider, K.*, Chappell, P.D., Powell, K., **Selden, C.R.** Variability in diazotroph abundance and gene expression at a coastal nitrogen fixation hotspot (Outer Banks, NC). Poster presentation at Ocean Sciences Meeting, Honolulu, HI. February, 2022. (Virtual)

[30] Zhu, Y. Mulholland, M., McGillicuddy, D., Chappell, P.D., Zhang, W., Clayton, S., **Selden, C.R.** Ammonium dynamics in the mid-Atlantic shelf-break frontal zone. Oral presentation at Ocean Sciences Meeting, Honolulu, HI. February, 2022. (Virtual)

[29] Mulholland, M., Meyer, M., Walker, W., **Selden, C.R.**, Bernhardt, P., Clayton, S. Is primary productivity enhanced near frontal zones? Oral presentation at Ocean Sciences Meeting, Honolulu, HI. February, 2022. (Virtual)

[28] Macías-Tapia, A., Mulholland, M., Clayton, S., Allen, T., **Selden, C.R.**, Loftis, D., Bernhardt, P. Quantifying interannual variability in dissolved nutrient inputs during annual king tide flooding. Oral presentation at Ocean Sciences Meeting, Honolulu, HI. February, 2022. (Virtual)

[27] Macias-Tapia, A., Clayton, S., Loftis, D., Allen, T., Bernhardt, P., Mulholland, M., **Selden, C.R.** Evaluation of extensive tidal flooding biochemical spatial characterization: nutrient input estimations and their relationship with land cover. Oral presentation at AGU Fall Meeting, New Orleans, LA. December, 2021.

[26] **Selden, C.R.**, Einarsson, D.S., Lowry, K., Crider, K.*, Pickart, R., Ashkian C., Chappell, P.D. Coastal upwelling enhances abundance of a symbiotic diazotroph (UCYN-A) and its host in the Arctic Ocean. Poster presentation at Ocean Carbon Biogeochemistry Summer Workshop, Woods Hole, MA. June, 2021. (Virtual)

[25] Poudel, S., **Selden, C.R.** Nitrogenase diversity through time and space. Oral presentation at Goldschmidt Conference, Lyon, FR. July, 2021.

[24] *Crider, K., **Selden, C.R.**, Powell, K., Chappell, P.D. Quantifying diazotroph abundance and relative activity in the Outer Banks, NC. Poster presentation at ODU Graduate Research Achievement Day, Norfolk, VA. April, 2021. (Virtual)

[23] *Confesor, K., **Selden, C.R.**, Powell, K., Knapp, A., Buck, K., Donajue, L., Chappell, P.D. Defining the environmental niche of the two main clades of Trichodesmium: A case study on the Wester Florida Shelf. Poster presentation at ODU Graduate Research Achievement Day, Norfolk, VA. April, 2021. (Virtual)

[22] Oliver, H., Zhang, W., Smith, W., Alatalo, P., Chappell, P.D., Hirzel, A., **Selden, C.R.**, Sosik, H., Stanley, R., Zhu, Y., Packard, G., Poole, J., McGillicuddy, D. Western boundary current instability gives rise to extraordinary subsurface diatom blooms in the Middle Atlantic Bight slope sea. Oral presentation at AGU Fall Meeting, San Francisco, CA. December, 2020. (Virtual)

[21] Macías-Tapia, A., Loftis, D., **Selden, C.R.**, Zhu, Y., Echevarria, M., Flefel, I., Perez-Vega, E., Mulholland, M. Water quality at the catchment scale: Measuring and modeling of nutrients, sediment and eutrophication impacts. Oral presentation at EGU General Assembly Meeting, Vienna, Austria. May, 2020. (Virtual)

[20] **Selden, C.R.**, Mulholland, M., Chappell, P. D., Clayton, S., Macías-Tapia, A., Berhardt, P., McGillicuddy, D. Effects of water mass mixing on diazotrophy at the New England shelfbreak front. Oral presentation at TOS Ocean Sciences Meeting, San Diego, CA. February, 2020.

[19] *Confesor, K., **Selden, C.R.**, Powell, K., Knapp, A., Buck, K., Chappell, P. D., *Donahue, L. An examination of niche separation in two primary Trichodesmium clades along the West Florida Shelf. Poster presentation at TOS Ocean Sciences Meeting, San Diego, CA. February, 2020.

[18] Chappell, P. D., Buck, K., **Selden, C.R.**, Caprara, S., Summers, B., Mellett, T., Confesor, K., Powell, K., Donahue, L., Boiteau, R., Conway, T., Charette, M., Tamborski, J., McKenna, A., Knapp, A. Correlated dissolved organic nitrogen and dissolved iron concentrations on the West Florida Shelf: signatures of submarine groundwater discharge and Trichodesmium thiebautii. Oral presentation at TOS Ocean Sciences Meeting, San Diego, CA. February, 2020.

[17] Macías-Tapia, A., Loftis, D., **Selden, C.R.**, Zhu, Y., Echevarria, M., Flefel, I., Perez-Vega, E., Mulholland, M. Water quality impacts from tidal flooding in the Southern Chesapeake Bay. Oral presentation at TOS Ocean Sciences Meeting, San Diego, CA. February, 2020.

[16] Mulholland, M., **Selden, C.R.**, Bernhardt, P., Widner, B. Primary productivity and nitrogen uptake in the eastern tropical Pacific Ocean. Oral presentation at TOS Ocean Sciences Meeting, San Diego, CA. February, 2020.

[15] Mulholland, M., Echevarria, M., Bernhardt, P., Blumen, L., Perez-Vega, E., Macías-Tapia, A., Flefel, I., Zhu, Y., **Selden, C.R.**, Pecher, B., Klinck, J., Hofmann, E. Interannual variability in blooms of Margilefidinium polykrikoides in the southern Chesapeake Bay. Oral presentation at the US HAB Symposium, Orange Beach, AL. November, 2019.

[14] *Bowman, R., **Selden, C.R.**, Powell, K., Chappell, P.D. Examining the influence of eddies on diatom diversity at the New England shelf-break front. Oral presentation at ODU Research Experience for Undergraduates in Ocean, Earth and Atmospheric Sciences Symposium, Norfolk, VA. August, 2019.

[13] *Confesor, K., **Selden, C.R.**, Powell, K., Donahue, L., Chappell, P.D. Examining the niche separation of two primary Trichodesmium clades along the West Florida shelf. Oral presentation at ODU Research Experience for Undergraduates in Ocean, Earth and Atmospheric Sciences Symposium, Norfolk, VA. August, 2018.

[12] **Selden, C.R.**, Mulholland, M., Widner, B., Bernhardt, P., Macías-Tapia, A., Jayakumar, A. A. Dinitrogen fixation across physico-chemical gradients of the Eastern Tropical North Pacific oxygen deficient zone. Poster presentation at ODU Graduate Research Achievement Day, Norfolk, VA. April, 2019.

[11] **Selden, C.R.**, Chappell, P. D., Widner, B., Macías-Tapia, A., Bernhardt, P., Mulholland, M. Reconsidering coastal diazotrophy in the North Atlantic: High rates of N_2 fixation along the U.S. southeastern seaboard. Oral presentation at TOS Ocean Sciences Meeting, Portland, OR. February, 2018.

[10] Mulholland, M., Bernhardt, P., Hyde, K., Mannino, A., Widner, B., Chappell, P. D., **Selden, C.R.** Primary productivity and dinitrogen fixation on the North Atlantic continental shelf. Oral presentation at TOS Ocean Sciences Meeting, Portland, OR. February, 2018.

[9] *Donahue, L., **Selden, C.R.**, Powell, K., Chappell, P.D. How do Trichodesmium clade abundances correlate with nutrient and trace metal data along the West Florida shelf? Oral presentation at ODU

Research Experience for Undergraduates in Ocean, Earth and Atmospheric Sciences Symposium, Norfolk, VA. August, 2018.

[8] **Selden, C.R.** Dinitrogen fixation in the Pacific Ocean oxygen deficient zones. Oral presentation at ODU Graduate Research Achievement Day, Norfolk, VA. March, 2017.

[7] **Selden, C.R.**, Mulholland, M., Widner, B., Bernhardt, P., Macías-Tapia, A., Jayakumar, A. Significance of anoxic and aphotic diazotrophy in the Eastern Tropical North Pacific oxygen deficient zone. Oral presentation at ASLO Aquatic Sciences Meeting, Honolulu, HI. February, 2017.

[6] **Selden, C.R.**, Mulholland, M., Widner, B., Bernhardt, P., Macías-Tapia, A., Jayakumar, A. Distribution and magnitude of dinitrogen fixation in the Eastern Tropical North Pacific oxygen deficient zone. Poster at AGU Fall Meeting, San Francisco, CA. December, 2016.

[5] Hastings, D., Bartlett, T., Brooks, G., Larson, R., **Selden, C.R.**, Schwing, P., et al. Six years after the Deepwater Horizon oil spill: Impacts on marine sediments and fish. Oral presentation at College of Charleston Marine Biology Graduate Program Student Research Colloquium, Charleston, SC. September, 2016.

[4] Bartlett, T., Hastings, D., Brooks, G., Carr, B., **Selden, C.R.**, Quinn K. Changes in sedimentary barium following the BP DWH blowout event. Poster at Gulf of Mexico Oil Spill and Ecosystem Science Conference, Houston, TX. February, 2015.

[3] **Selden, C.R.**, Hastings, D., Schwing, P., Brooks, G., Hollander, D. Correlational changes in benthic Foraminifera abundance and sedimentary redox conditions after the Deepwater Horizon blowout. Poster at Eckerd College Student Research Symposium, St. Petersburg, FL. April, 2014.

[2] Hastings, D., Schwing, P., Brooks, G., **Selden, C.R.**, Quinn, K. Changes in sediment redox conditions following the BP Deepwater Horizon Blowout Event. Poster at Ocean Sciences Meeting, Honolulu, HI. February, 2014.

[1] **Selden, C.R.**, Hastings, D., Schwing, P., Brooks, G., Hollander, D. (2014). Correlational changes in benthic Foraminifera abundance and sedimentary redox conditions after the DWH blowout event. Poster at Gulf of Mexico Oil Spill Ecosystem Science Conference, Mobile, AL. January, 2014.

PROFESSIONAL SOCIETIES

Geochemical Society	2023 – present
Association for the Sciences of Limnology and Oceanography (ASLO)	2017 – present
The Oceanography Society (TOS)	2016 – present
American Geophysical Union (AGU)	2016 – 2022

REFERENCES

Nathan Yee, Professor
Departments of Environmental Sciences and Earth and Planetary Sciences, Rutgers University
E-mail: nyee@envsci.rutgers.edu; Phone: 848-932-5714

Paul G. Falkowski, Bennett L. Smith Chair in Business and Natural Resources
Departments of Earth and Planetary Sciences and Marine and Coastal Sciences, Rutgers University
Board of Governors Professor and Director of the Rutgers Energy Institute
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Margaret Mulholland, Professor
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