DR. PHOEBE DREUX CHAPPELL

Dr. Phoebe Dreux Chappell
Associate Professor
College of Marine Sciences
University of South Florida

KRC 2110
140 7th Ave S
St. Petersburg, FL 33701
E-mail: dreux@usf.edu

SUMMARY:

Enthusiastic and dedicated professor and administrator with > 20 years of experience in the academic research environment, including nine years of experience as university faculty and three years of experience in academic administration. Successful at working in collaborative environments as both a team player and a team leader. Effective in mentorship of students from diverse backgrounds. Proven abilities in obtaining extramural funding. Experience obtaining and managing research budgets and advising on department budget issues. Skilled in curricular development and evaluation.

EDUCATION:

University of Rhode Island, *South Kingstown, RI* 2009-2013
Postdoctoral Associate in Marine Microbiology

Massachusetts Institute of Technology/Woods Hole Oceanographic Institution *Woods Hole, MA* 2003-2009
MIT/WHOI Joint Ph.D. Program in Chemical Oceanography. Thesis: The Relationship Between Iron and Nitrogen Fixation in *Trichodesmium* spp.

Amherst College *Amherst, MA* 1996-2000
Magna Cum Laude Biology major with additional coursework in Environmental Studies and Computer Science.

Marine Biological Laboratory Semester in Environmental Science *Woods Hole, MA* 1998
Coursework in Aquatic, Terrestrial and Microbial Ecology.
Final project on Heavy Metal Accumulation in Sediments of Local Harbors.

PROFESSIONAL EXPERIENCE:

Scientific Steering Committee Chair, *Ocean Carbon Biogeochemistry Program*	Jan 2024-present
Associate Professor of Oceanography, *CMS, USF, St. Petersburg, FL*	May 2023-present
Scientific Steering Committee Vice-Chair, *Ocean Carbon Biogeochemistry Program*	Mar 2022-Dec 2023
Associate Chair of Ocean and Earth Sciences, *ODU, Norfolk, VA*	June 2019-May 2023
Associate Professor of Ocean and Earth Sciences, *ODU, Norfolk, VA*	July 2019- May 2023
Scientific Steering Committee Member, *Ocean Carbon Biogeochemistry Program*	Jan 2020-Mar 2022
Assistant Professor of Ocean, Earth and Atmospheric Sciences, *ODU, Norfolk, VA*	July 2013-July 2019
Postdoctoral Associate in Marine Microbiology, *URI, South Kingstown, RI*	July 2009-July 2013
Ph.D. Candidate in Chemical Oceanography, *MIT/WHOI, Woods Hole, MA*	June 2003-May 2009
Teaching Assistant Marine Chemistry, *MIT/WHOI, Woods Hole, MA*	Fall 2005
Research Technician *Tufts University Medical School, Boston, MA*	December 2001-June 2003
Analyst/Programmer *Intellibridge Corporation, Washington, DC*	September 2000-June 2001
Diver/Collector *Marine Biological Laboratory, Woods Hole, MA*	Summers 1996-1999
Research Intern *Woods Hole Oceanographic Institution, Woods Hole, MA*	Summer 1995
Research and Engineering Apprentice *US Army Research Office, Woods Hole, MA*	Summer 1993

RESEARCH INTERESTS:

Marine Microbial Ecology, Marine Genomics, Phytoplankton Physiology, Trace Metal Biogeochemistry, Aquatic Nitrogen Cycle, Oceanic and Coastal Marine Environments

HONORS, AWARDS, RECOGNITION:

Personal Awards and Honors:

2017 ODU College of Sciences Early Career Distinguished Faculty Award
2008 Selected to participate in Eco-DAS VIII Symposium
2008 Selected to participate in DISCO XXI Symposium
2005 National Defense Science and Engineering Graduate (NDSEG) Fellowship
2005 NSF Graduate Research Fellowship Honorable Mention
2005 EPA Star Fellowship (Declined)
2000 High Honors in Biology, Amherst College

Advisee Awards and Honors of Students Mentored At USF:

2023 SECOORA Vembu Subramanian Ocean Scholars Award to PhD Advisee, Emma Graves

Advisee Awards and Honors of Students Mentored At ODU:

2022 Meredith Construction Company Scholarship awarded to PhD Advisee, Kristina Confesor
2022 Zaneveld Endowed Scholarship awarded to PhD Advisee, Emma Graves
2022 Hillegass Research Award awarded to PhD Advisee, Emma Graves
2021 Kelley Endowed Scholarship awarded to MS Advisee, Kristina Confesor
2021 Zaneveld Endowed Scholarship awarded to PhD Advisee Katie Crider
2021 Hillegass Research Award awarded to PhD Advisee Katie Crider
2021 Advisee Corday Selden awarded College of Sciences Entsminger Dissertation Award for the best PhD dissertation in the College in 2020.
2021 PhD advisee Sveinn Einarsson awarded 1st place in ODUs Graduate Research Achievement Day
2020 Zaneveld Endowed Scholarship awarded to PhD Advisee Katie Crider
2019 Advisee Zuzanna Abdala awarded Knauss Policy Fellowship (started 2/1/2020)
2019 Advisee Zuzanna Abdala awarded NSF Graduate Research Internship Award
2018 Zaneveld Endowed Scholarship awarded to PhD Advisee Sveinn Einarsson
2017 Advisee Zuzanna Abdala awarded NSF Graduate Research Fellowship

Advisee Awards and Honors of Students Mentored During Postdoctoral Work:

2013 Ph.D. Candidate Advisee won ASLO Meeting Student Presentation Award
2012 Undergraduate Advisee won Ocean Sciences Meeting Student Presentation Award

REFEREED PUBLICATIONS (‡ = co-authored with students):

‡Gomes, K., B.L. Nunn, **P.D. Chappell**, and B.D. Jenkins. Subcellular proteomics for determining iron limited remodeling of plastids in the model diatom *Thalassiosira pseudonana* (Bacillariophyta). **J. Phycol.** 59, 1085–1099. https://doi.org/10.1111/jpy.13379

‡Burns, S.M., R.M. Bundy, W. Abbott, Z. Abdala, A.R. Sterling, **P.D. Chappell**, B.D. Jenkins, and K.N. Buck. (2023) Biogeochemical feedbacks between trace metals and phytoplankton growth in the Southern Ocean: Insights from measurements of dissolved trace metals during open ocean and coastal incubation experiments. **Limnol. Oceanogr.** Volume 68(3) p. 525-543. https://doi.org/10.1002/lno.12290

‡Sterling, A.R., L.Z. Holland, R.M. Bundy, S.M. Burns, K.N. Buck, **P.D. Chappell**, and B.D. Jenkins. (2023) Interconnected dynamics of diatoms and particle-associated bacteria in the iron-limited Western Antarctic Peninsula of the Southern Ocean. **Front. Mar. Sci.** Volume 9. https://doi.org/10.3389/fmars.2022.876830

‡Einarsson, S., K. Lowry, P. Lin, R.S. Pickart, C. Ashjian, and **P.D. Chappell**. (2022) *Alexandrium* on the Alaskan Beaufort Sea Shelf: Impact of Upwelling. **Harmful Algae.** Volume 120. https://doi.org/10.1016/j.hal.2022.102346

‡Abdala, Z.A., S. Clayton, S. Einarsson, K.E. Powell, C. Till, T. Coale, and **P.D. Chappell**. (2022) Examining ecological succession of diatoms in California Current system cyclonic mesoscale eddies. **Limnol. Oceanogr.** Volume 67 (11) p. 2586-2602. https://doi.org/10.1002/lno.12224

‡Selden[1], C.R., S. Einarsson[1], K. Lowry, K. Ashjian, K. Crider, R.S. Pickart, and **P.D. Chappell**. (2022) Increased abundance of a symbiotic diazotroph (UCYN-A) and its host linked to upwelling of high-nitrate waters in the Arctic Ocean. **Front. Mar. Sci.** Volume 9 https://www.frontiersin.org/articles/10.3389/fmars.2022.877562 ([1]co-first author)

‡Confesor, K., C.R. Selden, K.E. Powell, L. Donahue, T. Mellett, S. Caprara, A.N. Knapp, K.N. Buck, and **P.D. Chappell**. (2022) Defining the realized niche of the two major clades of *Trichodesmium*: a study on the West Florida Shelf. **Front. Mar. Sci.** Volume 9. https://www.frontiersin.org/articles/10.3389/fmars.2022.821655

‡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. and McGillicuddy, D.J. (2021) Diatom hotspots driven by western boundary current instability. **Geophysical Research Letters.** 48(11) e2020GL091943. https://doi.org/10.1029/2020GL091943

‡Selden, C.R., **Chappell, P.D.**, Clayton, S. Macias-Tapia, A., P.W. Bernhardt, and Mulholland, M.R. (2021) A coastal N2 fixation hotspot at the Cape Hatteras front: Elucidating spatial heterogeneity in diazotroph activity via supervised machine learning. **Limnology and Oceanography.** 66(5): 1832-1849 https://doi.org/10.1002/lno.11727

Tuo, S., Mulholland, M.R., Lee Chen, L., **Chappell, P.D.**, and Chen, H. (2021) Patterns in *Rhizosolenia*- and *Guinardia*-associated *Richelia* abundances in the tropical marginal seas of the western North Pacific. **Journal of Plankton Research**. Volume 43, Issue 3, Pages 338-352, https://doi.org/10.1093/plankt/fbab022

Twining, B.S., Antipova, O., **Chappell, P.D**., Cohen, N.R., Jacquot, J.E., Mann, E.L., Marchetti, A., Ohnemus, D.C., Rauschenberg, S. and Tagliabue, A. (2021), Taxonomic and nutrient controls on phytoplankton iron quotas in the ocean. **Limnology and Oceanography Letters**. 6(2): 96-106 https://doi.org/10.1002/lol2.10179

‡Mulholland, M.R., P.W. Bernhardt, B. Widner, C.R. Selden, **P.D. Chappell,** S. Clayton, A. Mannino, and K. Hyde. 2019. High rates of N_2 fixation in temperate, western North Atlantic coastal waters expands the realm of marine diazotrophy. **Global Biogeochemical Cycles***, 33*, 1-15. doi:10.1029/2018GB006130

Chappell, P.D., E.V. Armbrust, K. Barbeau, R.M. Bundy, J.W. Moffett, J. Vedamati, and B.D. Jenkins. 2019. Patterns of diatom diversity correlate with dissolved trace metal concentrations and longitudinal position in the NE Pacific coastal-offshore transition zone. **Marine Ecol. Prog. Ser.** DOI: 10.3354/meps12810

Mellett, T., M. Brown, **P.D. Chappell**, C. Duckham, J. Fitzsimmons, C. P. Till, R. Sherrell, M. Maldonado, and K.N. Buck. 2018. The biogeochemical cycling of iron, copper, nickel, cadmium, manganese, and scandium in a California Current experimental study. **Limnol. Oceanogr**. 63 (S1): S425-S447. doi: 10.1002/lno.10751.

‡Nunn, S., **P.D. Chappell,** K. Gomes, A. Bonderenko, B. Jenkins, B.L. Nunn. 2017. Phytoplankton plastid proteomics: Cracking open diatoms to understand plastid biochemistry under iron limitation. **Journal of Emerging Investigators**, February 2017.

‡**Chappell, P.D.** Vedamati, J., Selph, K. E., Cyr, H. A., Jenkins, B. D., Landry, M. R. and Moffett, J. W. 2016. Preferential depletion of zinc within Costa Rica Upwelling Dome creates conditions for zinc co-limitation of primary production. **J. Plankton Res.** 38 (2): 244-255. doi: 10.1093/plankt/fbw018

‡**Chappell, P.D.**[1], L.P. Whitney[1], J.R. Wallace, A.I. Darer, S. Jean-Charles, and B.D. Jenkins. 2015. Genetic indicators of iron limitation in wild populations of *Thalassiosira oceanica* from the northeast Pacific Ocean. **ISME J.** 9(3): 592-602. doi:10.1038/ismej.2014.171 ([1]co-first author)

Chappell, P.D., L.P. Whitney, T.L. Haddock, S. Menden-Deuer, E.G. Roy, M.L. Wells, and B.D. Jenkins. 2013. *Thalassiosira* spp. community composition shifts in response to chemical and physical forcing in the northeast Pacific Ocean. **Front. Microbio. 4**:273. doi: 10.3389/fmicb.2013.00273

Chappell, P.D., J.W. Moffett, A.M. Hynes and E.A. Webb. 2012. Molecular Evidence of Iron Limitation and Availability in the Global Diazotroph *Trichodesmium*. **ISME J.** 6: 1728-1739. [doi:10.1038/ismej.2012.13].

Whitney, L.P., J.J. Lins, M.P. Hughes, M.L. Wells, **P.D. Chappell**, and B.D. Jenkins. 2011. Characterization of putative iron responsive genes as species-specific indicators of iron stress in *Thalassiosiroid* diatoms. **Front. Microbio.** 2:234. doi: 10.3389/fmicb.2011.00234

Dupont, Chris L., **Dreux Chappell,** Ramiro Logares, and Maria Vila-Costa. 2010. A hitchhiker's guide to the new molecular toolbox for ecologists, p. 17-29. In P.F. Kemp [ed.], **Eco-DAS VIII Symposium Proceedings.** ASLO. [doi: 10.4319/ecodas.2010.978-0-9845591-1-4.17]

Chappell, P.D. and E.A. Webb. 2010. Development of a Molecular Marker for Iron Stress in *Trichodesmium*. **Environ. Microbiol.** 12(1): 13-27. Doi:10.1111/j.1462.2920.2009.02026.x

Hynes, A. M., **P. D. Chappell**, S. T. Dyhrman, S. C. Doney, and E. A. Webb. 2009. Cross-basin comparison of phosphorus stress in *Trichodesmium*. **Limnol. Oceanogr.** 54(5):1438–1448. doi:10.4319/lo.2009.54.5.1438

Dyhrman, S.T., **P. D. Chappell**, S. T. Haley, J. W. Moffett, E. D. Orchard, J. B. Waterbury, E. A. Webb. 2006. Phosphonate utilization by the globally important marine diazotroph *Trichodesmium*. **Nature.** 439:68-71. doi:10.1038/nature04203

OTHER PUBLICATIONS (not peer reviewed; † = invited):

† **Chappell, Dreux**. 2016. Exploring molecular methods for assessing trace element bioavailability in phytoplankton. Ocean Carbon Biogeochemistry News. 9(2):12-14.

MANUSCRIPTS IN REVIEW OR REVISION (‡ = co-authored with students):

‡Einarsson, S., K.E. Powell, C. Till, T. Coale, and **P.D. Chappell**. High and Low Iron Upwelling and Corresponding Shifts in the Diatom Community. In review at **MEPS.**

‡Zhu, Y., C.R. Selden, D.J. McGillicuddy, **P.D. Chappell**, W.G. Zhang, M.G. Meyer, K.E. Crider, H. Oliver, S. Clayton, and M.R. Mulholland. Contrasting Nitrogen Dynamics in the Euphotic Zone across the Mid-Atlantic Bight Shelfbreak Front: Insights from Nitrate Dual Isotopes and Nitrifier Gene Abundance. In review at **Limol. Oceanogr.**

‡Selden, C.R., M.R. Mulholland, K.E. Crider, S. Clayton, A. Macias-Tapia, P. Bernhardt, D.J. McGillicuddy, Jr., W.G. Zhang, and **Chappell, P.D.** Nitrogen Fixation at the Mid-Atlantic Bight Shelfbreak and Transport of Newly-Fixed Nitrogen to the Slope Sea. In review at JGR-Oceans

MANUSCRIPTS IN FINAL PREPARATION (‡ = co-authored with students; Drafts available):

‡Einarsson, S., K. Lowry, P. Lin, R.S. Pickart, C. Ashjian, and **P.D. Chappell**. Eukaryotic community composition through different stages of Alaskan Beaufort Sea upwelling. In preparation for **Limnol. Oceanogr.**

PROFESSIONAL PRESENTATIONS:

Details of >35 oral and poster presentations as first author and >55 co-author presentations in a variety of professional settings including national and international scientific meetings and invited talks at Universities are listed at the end of this CV

GRANT PROPOSALS AND OTHER FUNDING:

Grants Awarded: Funded Proposals (as Lead Principal Investigator), Current:
Project Title: Collaborative Research: Linking Fe and nitrogen sources in an oligotrophic coastal margin: N2 fixation and the role of boundary fluxes
Lead Institution: FSU, Principal Investigator A. Knapp
Lead Principal Investigator USF: P.D. Chappell, USF; J. Tamborski, subcontract ODU
Additional Institutions: OSU, K. Buck & T. Conway (USF Subcontract); UM, Co-PI R. Boiteau;
Subcontract FSU: USGS, C. Smith
Submitted to: NSF Chemical Oceanography
Total Amount Requested: $838,584 to USF ($460,615 to PDC)
Proposed Award Period: 5/1/2022-4/30/2025

Grants Awarded: Funded Proposals (as Lead PI), Past:
Project Title: Collaborative Research: Quantifying the effects of variable light and iron on the nitrate assimilation isotope effect of Phytoplankton
Lead Institution: FSU, Principal Investigator S. Kranz, Co- Principal Investigator A. Knapp
Lead Principal Investigator ODU: P.D. Chappell, ODU
Source of Support: NSF Chemical Oceanography
Total Amount Awarded to ODU (P.D. Chappell Sole PI ODU): $369,112
Award Period: February 15, 2019 – July 31, 2023

Project Title: Exploring a pelagic N_2 fixation "hotspot" along the Mid-Atlantic Bight continental shelf.
Sole Principal Investigator: P.D. Chappell, ODU
Source of Support: Jeffress Research Grants Program
Total amount awarded: $120,000 (P.D. Chappell Sole PI)
Award Period: June 30, 2019-October 15, 2021

Title: Collaborative Research: Investigating iron-binding ligands in Southern Ocean diatom communities: The role of diatom-bacteria associations
Lead Institution: URI (Principal Investigator, B. Jenkins)
Additional Institutions: USF (Principal Investigator, K. Buck)
Source of Support: NSF Division of Polar Programs
Total Amount Awarded to ODU (P.D. Chappell Sole PI ODU): $370,537
Award Period: July 15, 2015 – June 30, 2019

Title: OCE-RIG: Developing Molecular Bioassays for Evaluating Iron Status of Environmentally Relevant Diatoms
Sole Principal Investigator: P.D. Chappell, ODU
Source of Support: NSF Division of Ocean Sciences
Total Award Amount: $100,000
Award Period: September 1, 2015 – August 31, 2018

Title: Using molecular bioassays to assess iron limitation of diatoms in the California Current System.
Sole Principal Investigator: P.D. Chappell, ODU
Source of Support: Virginia Space Grant Consortium New Investigator Program
Total Award Amount: $10,000
Award Period: February 21, 2014 – September 1, 2015

Grants Awarded: Funded Proposals (as Co-Principal Investigator), Past:

Title: MRI: Acquisition of a High Resolution Plasma Source Mass Spectrometer and Sample Introduction System for Multidisciplinary Geosciences Research and Education
Lead Principal Investigator: P. Sedwick; Co-PIs: G. Cutter; M. Schmidt; P.D. Chappell
Source of Support: NSF
Total Amount Awarded: $644,466
Award Period: January 1, 2016 – December 31, 2018

Grants Awarded: Research Grant Awards of Goods/Services:

2014 Florida Institute of Oceanography award of 3 subsidized ship days on the R/V Weatherbird II. Lead Principal Investigator K. Buck, USF. Co- Principal Investigators: A. Knapp, FSU & P.D. Chappell, ODU. (Equivalent to $30,000 award).

2013 Marine Microbial Eukaryote Transcriptome Project award to Dr. Bethany Jenkins, Sequence and Assembly of 18 Transcriptomes from *Thalassiosira weissflogii*. Listed as co- Principal Investigator. (Equivalent to at least $9,000 value)

2011 Marine Microbial Eukaryote Transcriptome Project award to Dr. Bethany Jenkins, Sequence and Assembly of 4 Transcriptomes from *Thalassiosira oceanica*. Listed as co- Principal Investigator. (Equivalent to at least $2,000 value)

2011 Marine Microbial Eukaryote Transcriptome Project award to Dr. Bethany Jenkins, Sequence and Assembly of 4 Transcriptomes from *Thalassiosira weissflogii*. Listed as co- Principal Investigator. (Equivalent to at least $2,000 value)

Grants Awarded: Research Grant Awards (participant in proposal preparation, not Principal Investigator)

2010 NSF Award OCE-0962208 to Dr. Bethany Jenkins, Genomic and Transcriptomic Comparison of Iron and Light Physiology in Coastal and Oceanic Diatoms. (Award amount: $700,000)

2006 NSF Award OCE-0623499 to Dr. Eric Webb and Dr. James Moffett, Exploring the Linkages Between Trichodesmium spp. Physiology, Diversity, and Iron Geochemistry in the Ocean. (Award amount: $660,330)

PROFESSIONAL TRAINING:

2021 Alan Alda Center for Communicating Science Women in STEM Leadership Program
2018 ODU COS Grant Writing Workshop
2017 ODU Improving Disciplinary Writing Workshop
2013 Strategies and Techniques for Analyzing Microbial Population Structures (MBL)
2009 OCB Ocean Acidification Short Course

WORKSHOP PARTICIPATION:

2021 Laying the Foundation for a potential future BioGeoSCAPES program – OCB Scoping Workshop
2020 OCB Ocean Nucleic Acids 'OMICS intercalibration and standardization workshop
2018 OCB Nitrogen Fixation Best Practices Working Group Meeting
2016 GEOTRACES Internal Cycling Workshop
2015 IRN-BRU Cruise Data Workshop
2014 Taxon-Specific Biogeochemistry - OCB Scoping Workshop
2013 GeoMICS Data Workshop
2010 The Molecular Biology of Biogeochemistry – OCB Scoping Workshop

TEACHING AND CURRICULUM DEVELOPMENT:

Spring 2023 Global Earth Systems (OEAS 310), ODU
Fall 2022 Marine Microbiology (OEAS 833), ODU
Spring 2022 Global Earth Systems (OEAS 310), ODU
A/Y 2021-2 Working to restructure Oceanography Track Curriculum

Fall 2021	Marine Molecular Ecology (OEAS 453W/553), ODU
Spring 2021	Global Earth Systems (OEAS 310), ODU – Taught online
Fall 2020	Research Skills and Information Literacy for the Natural Sciences (OEAS 130G), ODU – Taught online.
Fall 2020	TPCS: Biological Oceanography: Microbial View of Iron (OEAS 895), ODU
Spring 2020	Global Earth Systems (OEAS 310), ODU
Fall 2019	Designed the Environmental Sciences Track Curriculum (first students enrolled Fall 2020)
Fall 2019	Global Earth Systems (OEAS 310), ODU
Spring 2019	Marine Microbiology (OEAS 833), ODU
Fall 2018	Global Earth Systems (OEAS 310), ODU
Spring 2018	Marine Molecular Ecology (OEAS 453/553), ODU
Fall 2017	Global Earth Systems (OEAS 310), ODU
Spring 2017	OEAS Graduate Seminar Discussion Course (OEAS 695), ODU
Fall 2016	Global Earth Systems (OEAS 310), ODU
Spring 2016	Developed and taught new lecture/lab course in Marine Molecular Ecology (initially OEAS 495/595, now OEAS 453/553), ODU
Fall 2015	Taught Global Earth Systems (OEAS 310), ODU
Spring 2015	Developed and taught new lecture/lab course in Marine Microbial Ecology (initially OEAS 495, now OEAS 452), ODU
Spring 2015	Guest lecturer in Molecular Ecology (BIOL 453/553), ODU
Fall 2014	Co-taught Global Earth Systems (OEAS 310), ODU
Spring 2014	Co-taught Marine Microbiology (OEAS 733/833), ODU
Spring 2014	Co-taught Multidisciplinary 'OMICS seminar (OEAS 695), ODU
Spring 2013	Co-taught Advanced Microbiology, University of Rhode Island
Fall 2005	Teaching Assistant - Marine Chemistry, MIT/WHOI Joint Program

ADVISING:

Graduate Student Advising:

Fall 2021	Began mentoring ODU Ph.D. student Emma Graves
Fall 2020	Began mentoring ODU Ph.D. student Katherine Crider
Fall 2020	Began mentoring ODU MS student Kristina Confesor (MS degree awarded May 2022, Accepted to PhD program)
Spring 2018	Began mentoring ODU Ph.D. student, Corday Selden (PhD received December 2020)
Fall 2016	Began mentoring incoming ODU MS student Sveinn Einarsson (MS received August 2018; Admission to Ph.D. program August 2018; Ph.D. received November 2021)
Summer 2015	Began mentoring incoming ODU MS student Zuzy Abdala (MS received May 2019)
Summer 2014	Mentored incoming ODU MS student Amanda Laverty on research cruise.
2012-2013	Co-mentored URI M.S. Candidate, Tani Leigh.
2011-2013	Co-mentored URI Ph.D. Candidate, Joselynn Wallace.
Fall 2011	Co-mentored rotating graduate student Paul Azzinario (URI).
Fall 2009	Co-mentored rotating graduate student John Ventura (URI).

Undergraduate Student Advising:

Fall 2022	Mentoring ODU Undergraduate Jordyn Leeper on research project with *Vibrio*
2014-present	Undergraduate advisor for OEAS majors
A/Y 2019-20	Mentored ODU Undergraduate Kirsten Travis
Summer 2019	Mentored ODU Undergraduate Chanel Flores-Vargas
Summer 2019	Mentored OEAS REU Student Ruric Bowman (Lycoming)
Summer 2019	Mentored OEAS REU Student Kristina Confesor (Heidelberg University)
Summer 2018	Mentored ODU Undergraduate Emily Rickman
Summer 2018	Mentored OEAS REU Student Laura Donahue (Haverford College).

Summer 2017	Mentored OEAS REU Student Noahie Encarnacion (USF).
2016-17	Mentored OEAS undergraduate researcher Patricia Caroccia (Class of 2017)
A/Y 2015-16	Mentored OEAS undergraduate researcher Sveinn Einarsson (Class of 2016)
Summer 2015	Mentored OEAS REU Student Dylan Cronin (Bowling Green State U)
Spring 2015	Mentored OEAS undergraduate researcher Jessica Pruitt (Class of 2016)
Summer 2013	Mentored SURFO REU Student Aislinn Crank (Barnard College Class of 2014).
Summer 2012	Mentored SURFO REU student Samantha Maness (Pfeiffer University, 2013).
Fall 2011	Mentored URI undergraduate and graduate students on a 6-day research cruise.
Summer 2011	Mentored SURFO REU student Adam Darer (Oberlin College, 2012).
Summer 2010	Mentored USC graduate students Jagruti Vedamati & Matt Bruno, USC undergrad Jessica Tsay & URI undergrad Heather Cyr on 35-day research cruise
Summer 2008	Co-mentored USC summer REU Bethanie Edwards (Hendrix College, 2009)
Summer 2007	Co-mentored USC summer REU Megan Niesen (University of Georgia, 2008)

OEAS Ph.D. Dissertation Committees:

2021-present	Tara Williams, Ph.D. student
2016-2021	Carmen Zayas-Santiago, Ph.D. awarded Summer 2021
2015-2018	Molly Mikan, Ph.D. awarded Spring 2018
2014-2017	Ariel DeGree, Ph.D. Candidate – left without defending

OEAS MS Thesis Committees:

2021-present	Noah Craft, MS student
2021-present	Katrina Shotorban, MS student
2015-2018	Christine Sookhdeo, MS awarded Fall 2018
2014-2018	Amanda Laverty, MS awarded Summer 2018

OTHER UNIVERSITY SERVICE:

University Level Service:

2014-2023	Contact person for CLC Bio at Old Dominion University – Coordinating access, installation, and training.
2015	Panelist ODU Women In Science Group Careers In Science Workshop
2015	Guest Speaker on Careers in Oceanography for ODU's Marine Biology Club

College Level Service:

2017-2018	Member of Research Infrastructure Subcommittee, ODU College of Sciences

ODU Department Level Service:

2023	Search Committee Member, Physical Oceanography Search, CMS, USF
2019-2023	Associate Chair Department of Ocean and Earth Sciences, ODU
2019-2023	Executive Committee Member Department of Ocean and Earth Sciences, ODU
2016-2023	ICP-MS Management Committee Member ODU
2015-2023	Undergraduate Education Committee Member Ocean and Earth Sciences, ODU
2021-2022	Chair of 100-level Oceanography Course Restructuring Committee
Spring 2021	Department Manager Search Committee Member
2018-2019	Remote Sensing Faculty Search Committee Member
Spring 2018	OEAS 441/442W Ad Hoc Evaluation Committee Member
2015-2016	Coastal Processes Faculty Search Committee Member
Spring 2015	Department Hiring Priority Planning Committee Member
2014-2015	OEAS Undergraduate Curriculum Review Committee Member

OTHER PROFESSIONAL SERVICE:

Professional Service:

Ongoing	Reviewer for NSF Chemical & Biological Oceanography and Polar Programs (NSF panelist in 2015 and 2016), Sea Grant (Maryland, South Carolina), Center of Excellence PostDoctroral Fellowship Program, Kiel, Germany
Ongoing	Reviewer for Scientific Journals (Biogeochemical Cycles, Botanica Marina, DSRII, Environmental Microbiology, ISME Journal, Journal of Plankton Research, Limnology & Oceanography, PLOS One, Polar Biology, Protist, Scientific Reports)
Since 2024	OCB Scientific Steering Committee Chair
Since 2021	Review editor for Journal Frontiers in Aquatic Microbiology
Since 2020	Member of the OCB Scientific Steering Committee
Since 2017	Member of the OCB N_2 Fixation Working Group
2022-2023	OCB Scientific Steering Committee Vice Chair
2016-2017	Book proposal and book chapter review Oxford University Press
2017	Discussion Leader Chemical Oceanography Gordon Research Conference
2015-16	GEOTRACES-OCB Internal Cycling Synthesis Planning Committee Member
2014	Organized a training workshop for the CLC Genomics Workbench at ODU
2013	Co-hosted a town hall meeting at ASLO on the Marine Microbial Eukaryote Transcriptome Project
2005-2006	Student representative to WHOI Education Council
2004-2006	Chemistry representative to Joint Program Student Government

Community Engagement:

Since 2023	Participated in Scientists in the Classroom
2014-2022	Participated in National Ocean Sciences Blue Crab Bowl
April 2021	Presentation to Hampton High School's Dual Enrollment research design class on writing an NSF proposal
March 2021	Presentation to NYC Math/Science High School Tech Club
March 2021	Presentation to Girl Scouts working on Oceanography Badge
Summer 2020	Panelist for the ODU REYES Virtual Summer Program
2017-2020	Scientific Mentor in "Scientists in the Classroom" Program Sinagua Middle School
2018	Science outreach with VA Young Scientist's Program
2017	Local STEM Leader for Road Trip Nation event at I.C. Norcom High School
2017	Interviewed by Saint Columbkille Partnership School Kindergartener about research in Antarctica
2015-16	Hosted high school student interns from Deep Creek High School
2016	Science outreach with VA Young Scientist's Program
2015	Guest Speaker on Careers in Oceanography at Grassfield High School's Science National Honor Society Induction Ceremony
2015	Panelist ODU Women In Science Group Careers In Science Workshop
2015	Guest Speaker on Careers in Oceanography for ODU's Marine Biology Club
2012-13	Participated in "DNA Detectives" outreach with the Girl Scouts of Rhode Island
2012	Participated in "CSI:Phytoplankton" at the Girl Scouts of Rhode Island Camp
2011	Participated in the "DNA in the Bay" booth at the Science Saturday Open House as part of URI's Graduate School of Oceanography's 50th Anniversary
2008	Presenter at Strategies for Engaging in Broader Impact Programs – COSEE OS and NEOSEC Workshop.

FIELDWORK AND RESEARCH CRUISE PARTICIPATION:

2023 July	R/V Endeavor, STING wet season cruise: Linking Fe and nitrogen sources in an oligotrophic coastal margin: N2 fixation and the role of boundary fluxes
2023 Feb	R/V Atlantic Explorer, STING dry season cruise: Linking Fe and nitrogen sources in an oligotrophic coastal margin: N2 fixation and the role of boundary fluxes

2022 June	R/V Weatherbird II, Chief Scientist on research cruise in Gulf of Mexico: Collected samples for DNA, RNA in collaboration with others collecting nutrients and trace metals to explore linkages between nutrient availability and harmful algal blooms.
6/2019-9/2020	~Monthly sampling at Jeanette's Pier in Nags Head, NC for diazotroph community composition and q/qRT-PCR, phytoplankton community composition, N_2 fixation rates, chlorophyll, and nutrients.
2019 Aug	R/V Miss Caroline, Chief Scientist on research day cruise along Outer Banks, NC
2019 May	R/V Ron Brown, Research cruise examining enhancement of nitrogen fixation and diatom community shifts at the New England Shelf Break front.
2019 Apr	R/V Weatherbird II, Co-Chief Scientist on research cruise in Gulf of Mexico: Collected samples for DNA, RNA in collaboration with others collecting nutrients, trace metals, and tracers of submarine groundwater discharge.
2018 Feb	R/V Hogarth, Co-Chief Scientist on research cruise along West Florida Shelf: Collected samples for DNA, RNA, and performed N_2 fixation and primary productivity rate measurements in collaboration with others collecting nutrients and trace metals. Isolated new *Trichodesmium* cultures.
2016 Sept-Oct	RVIB Nathanial B. Palmer, Research cruise in the Southern Ocean/Antarctic Peninsular region: DNA and RNA collection; Incubation studies; Diatom isolation.
2015 June	R/V Weatherbird II, Research cruise in Gulf of Mexico: Collected samples for DNA, RNA in collaboration with others collecting nutrients and trace metals. Isolated new *Trichodesmium* cultures.
2014 July	R/V Melville, IRN-BRU Cruise in California Current: Conducted trace metal incubation experiments and collected samples for DNA, RNA in collaboration with others collecting nutrients and trace metals.
2013 Oct	R/V Endeavor, UNOLS Chief Scientist Training Cruise: Conducted trace metal incubation experiments and collected samples for DNA, RNA, Nutrients, Chl.
2012 May	R/V Thompson, GeoMICS Pilot Cruise: Participated on trace metal sampling team and collected samples for DNA, RNA.
2011 Oct	R/V Endeavor, EN-500 Student Training Cruise: led phytoplankton sampling effort. Samples collected for: DNA, RNA, Nutrients, Chl, Flow Cytometry.
2010 Jun-Jul	R/V Melville, Costa Rica Upwelling: led trace metal sampling effort, deck-board incubations, biological sampling for qRT-PCR
2007 Jan-Feb	R/V Kilo Moana, Hawaii-Australia: trace metal sampling for Fe total analysis using ICP-MS, Fe speciation using CLE-CSV (shipboard), biological sampling for qRT-PCR
2006 Jul	R/V Seward Johnson, Equatorial Atlantic: trace metal sampling for Fe total analysis using ICP-MS, biological sampling for qRT-PCR
2006 Jan	R/V Lady Basten, Great Barrier Reef: trace metal sampling, Fe total analysis using ICP-MS (completed on land), biological sampling for qRT-PCR (completed on land)
2005 Oct-Nov	R/V Knorr, Peru Upwelling: trace metal sampling for Fe total analysis using ICP-MS, Fe speciation using CLE-CSV (shipboard)
2005 Jul-Aug	R/V Knorr, Costa Rica Upwelling: trace metal sampling for Fe total analysis using ICP-MS, Fe speciation using CLE-CSV (shipboard)
2004 Mar-Apr	R/V Oceanus, Sargasso Sea: trace metal sampling for Fe total analysis using ICP-MS, Fe speciation using CLE-CSV (shipboard), biological sampling for qRT-PCR

LABORATORY AND COMPUTATIONAL SKILLS:

Laboratory Skills: RNA and DNA isolation; Cloning; Quantitative PCR; Amplicon Sequencing; Genome Analysis; Transcriptome Analysis, Laboratory culturing techniques for marine Cyanobacteria and Diatoms; Trace metal field sampling; Nitrogen fixation rate measurements; Inductively coupled plasma mass spectrometry (ICP-MS) analysis of dissolved Fe; Competitive ligand exchange cathode stripping voltametry (CLE-CSV) analysis of Fe speciation; AAUS Science Diver

Software: Adobe, AlleleID, ARB, Clustal, CLC Genomics Workbench, FigTree, Geneious, Microsoft Office, Muscle, MacVector, Primer-e, Prism, Sequencher, SigmaPlot, Visual MintEQ.
Programming Languages/Environments: MatLab, Perl, Python, R.

PROFESSIONAL AFFILIATIONS:

Association for the Sciences of Limnology and Oceanography
Ocean Carbon Biogeochemistry Program
The Earth Science Women's Network

PROFESSIONAL PRESENTATIONS

Research Papers Presented At Professional Meetings and Universities (†, denotes invited presentation; ‡ = co-authored with students): Professional Presentations as First Author

2023 Texas Lutheran University Biology Seminar. Examining Environmental Forcing of Phytoplankton Communities Using Molecular Tools. P.D. Chappell, K.E. Powell, S. Einarsson, L. Haraguchi, A.N. Knapp, R. Thomas, S. Kranz, J. Rose, S. Fawcett, H. Forer, and E.E. Graves. (Oral Presentation, **†,‡)**

2022 OCB Summer Meeting: Phytoplankton Community Composition in Relation to Physico-Chemical Gradients in the Atlantic Sector of the Southern Ocean. P.D. Chappell, E. Graves, K.E. Powell, S.V. Einarsson, R. Thomas, H. Forrer, L. Haraguchi, S. Kranz, J. Rose, T. Ryan-Keogh, S. Fawcett, and A.N. Knapp (Poster, **‡)**

2022 USF College of Marine Sciences: Diatom Community Responses to Mesoscale Circulation in the California Current System. P.D. Chappell, Z.M. Abdala, S.V. Einarsson, K.E. Powell, C.P. Till, T.H. Coale, and S. Clayton (Oral Presentation, **†,‡)**

2022 UGA Marine Science Seminar: Diatom Community Responses to Mesoscale Circulation in the California Current System. P.D. Chappell, Z.M. Abdala, S.V. Einarsson, K.E. Powell, C.P. Till, T.H. Coale, and S. Clayton (Oral Presentation, **†,‡)**

2022 Ocean Sciences Meeting: Phytoplankton Community Responses to Iron and Light Stress in the Atlantic Sector of the Southern Ocean. P.D. Chappell, E. Graves, K.E. Powell, S.V. Einarsson, R. Thomas, H. Forrer, L. Haraguchi, S. Kranz, J. Rose, T. Ryan-Keogh, S. Fawcett, and A.N. Knapp (Oral Presentation, **‡)**

2020 Ocean Sciences Meeting: Correlated dissolved organic nitrogen and dissolved iron concentrations on the West Florida Shelf: signatures of submarine groundwater discharge and *Trichodesmium thiebautii*. P.D. Chappell, K.N. Buck, C. Selden, S. Caprara, B. Summers, T. Mellett, K.E. Powell, L. Donahue, R. Boiteau, T. Conway, M. Charette, J. Tamborski, and A.N. Knapp (Oral Presentation, **‡)**

2019 Chemical Oceanography GRC: Is the *Trichodesmium thiebautii* clade linked to the release of low delta 15N dissolved organic nitrogen on the West Florida Shelf? P.D. Chappell, K.N. Buck, T. Conway, C. Selden, K.E. Powell, C. Miranda, T. Mellett, S. Caprara, B. Summers and A.N. Knapp (Poster Presentation, ‡)

2018 OCB Summer Meeting: Both dissolved iron and coastal water additions to Southern Drake Passage waters stimulate similar growth responses and shifts in diatom community composition. P.D. Chappell, K.N. Buck, Z.M. Abdala, S. Burns, K. Powell, A. Sterling, B.D. Jenkins (Poster Presentation, ‡)

2018 Ocean Sciences Meeting: Both dissolved iron and coastal water additions to Southern Drake Passage waters stimulate similar growth responses and shifts in diatom community composition. P.D. Chappell, K.N. Buck, Z.M. Abdala, S. Burns, K. Powell, A. Sterling, B.D. Jenkins (Oral Presentation, ‡)

2017 Chemical Oceanography Gordon Conference: Does size matter? Evaluating the bioavailability of Fe size fractions to phytoplankton field populations. P.D. Chappell, K.E. Powell, J.N. Fitzsimmons (Poster Presentation)

2017 Texas A&M University: Ask the diatoms, using molecular methods to identify diatoms and determine their iron status. P.D. Chappell, J.R. Wallace, L.P. Whitney, B.D. Jenkins, K.E. Powell (Oral Presentation, †,‡)

2017 Florida State University: Ask the diatoms, using molecular methods to identify diatoms and determine their iron status. P.D. Chappell, J.R. Wallace, L.P. Whitney, B.D. Jenkins, K.E. Powell (Oral Presentation, †,‡)

2016 OCB/GEOTRACES Internal Cycling Workshop: Molecular indicators of trace element bioavailability P.D. Chappell (Oral Presentation, †)

2016 Ocean Sciences Meeting: Combining 'OMIC tools and other targeted molecular methods to evaluate iron limitation of diatoms in the Northeast Pacific Ocean. P.D. Chappell, J. Wallace, B.D. Jenkins, K. Powell (Oral Presentation, ‡)

2016 EMBO/EMBL Symposium A New Age of Discovery for Aquatic Microeukaryotes: Using comparative transcriptomics and database mining to develop molecular markers for iron limitation in diatoms. P.D. Chappell, J.R. Wallace, B.D. Jenkins (Poster Presentation)

2015 University of Maine: Developing the molecular toolkit to study linkages between ocean chemistry and diatom physiology. P.D. Chappell, J.R. Wallace, L.P. Whitney, B.D. Jenkins, K.E. Powell (Oral Presentation, †,‡)

2015 IRN-BRU Workshop: Testing bioavailability of different iron sources using incubations and gene expression analyses. P.D. Chappell, J.N. Fitzsimmons, D. Ohnemus, K.E. Powell, B. Twining (Oral Presentation)

2014 Old Dominion University HPC Day: Using the CLC Genomics Workbench on Turing to Study Global Gene Expression in Non-Model Organisms P.D. Chappell (Oral Presentation, †)

2014 Old Dominion University: Developing the molecular toolkit to identify diatoms and determine their iron status in the field. P.D. Chappell (Oral Presentation, †)

2014 ASLO Meeting: Comparison of whole cell transcriptional response to light and Fe in multiple diatom species. P.D. Chappell and B.D. Jenkins (Oral Presentation)

2014 Ocean Sciences Meeting: Trace metal-silicate co-limitation of diatoms in the Costa Rica Dome. P.D. Chappell, J.W. Moffett, H.A. Cyr, J. Vedamati, B.D. Jenkins (Poster Presentation, ‡)

2013 ASLO Meeting: Profiling *Thalassiosira* community composition and iron status on the GeoMICS cruise using molecular methods. P.D. Chappell, L.P. Whitney, S.L. Maness, J. Vedamati, J.W. Moffett, B.D. Jenkins (Oral Presentation, ‡)

2012 Old Dominion University: Sleuthing the Sea: Developing molecular tools to link ocean chemistry and phytoplankton physiology. P.D. Chappell (Oral Presentation, †)

2012 Marine Microbes Gordon Research Conference: Transcriptome of iron limited *Thalassiosira oceanica* provides insight into the iron stress response of oceanic diatoms. P.D. Chappell, L.P. Whitney, B.D. Jenkins (Poster Presentation)

2012 University of South Florida: Sleuthing the Sea: Developing molecular tools to link ocean chemistry and phytoplankton physiology. P.D. Chappell (Oral Presentation, †)

2011 Chemical Oceanography Gordon Research Conference: Combining fragment analysis and qRT-PCR to evaluate iron limitation of *Thalassiosirids* in the eastern subarctic Pacific Ocean. P.D. Chappell, A. Darer, L.P. Whitney, T.L. Haddock, J.J. Lins, E. Roy, M. Wells, B.D. Jenkins (Poster Presentation, ‡)

2011 RSMAS (U Miami): The Microbial Whodunit?: Developing molecular biological tools to link ocean chemistry and microbial activity. P.D. Chappell (Oral Presentation, †)

2011 ASLO Meeting: *Thalassiosirid* barcoding method reveals coastal diversity and regions of single species dominance in the Eastern Subarctic Pacific Ocean. P.D. Chappell and B.D. Jenkins (Oral Presentation)

2010 Ocean Sciences Meeting: Developing Genomic and Proteomic Infrastructure to Study the Diatom Genus *Thalassiosira* in the Laboratory and the Field. P.D. Chappell, J.J. Lins, J. Ventura, B.D. Jenkins (Poster Presentation, ‡)

2009 URI Graduate School of Oceanography Bio at Noon Seminar: Demonstration of iron limitation of N_2 fixation in the lab and the field and implications for iron availability in *Trichodesmium*. P.D. Chappell, A.M. Hynes, J.W. Moffett, J. Waterbury, E.A. Webb (Oral Presentation, †)

2009 Chemical Oceanography Gordon Research Conference: The Relationship Between Iron and Nitrogen Fixation in *Trichodesmium* spp. (Poster Presentation)

2009 Aquatic Sciences Meeting: Development and Implementation of an Fe Stress Assay in *Trichodesmium* spp. P.D. Chappell, J.W. Moffett, A.M. Hynes, J. Waterbury, E.A. Webb (Oral Presentation)

2008 Ecological Dissertations in the Aquatic Sciences: Diversity and Iron Ecology of *Trichodesmium*. P.D. Chappell and A.M Hynes. Co-first authors. (Oral Presentation)

2008 Dissertations Symposium on Chemical Oceanography: Development and Implementation of an Fe Stress Assay in *Trichodesmium* spp. P.D. Chappell, J.W. Moffett, J. Waterbury, E.A. Webb (Oral Presentation)

2008 Southern California Geobiology Symposium: Using QRT-PCR of the Fe Stress Response Gene *isiB* to Relate N Fixation Rates and Growth Under Different Fe Conditions in *Trichodesmium* spp. P.D. Chappell, J.W. Moffett, J. Waterbury, E.A. Webb (Poster Presentation)

2008 Ocean Sciences Meeting: Using QRT-PCR of the Fe Stress Response Gene *isiB* to Relate N Fixation Rates and Growth Under Different Fe Conditions in *Trichodesmium* spp. P.D. Chappell, J.W. Moffett, J. Waterbury, E.A. Webb (Poster Presentation)

2007 EGGS Seminar Princeton University: The *Trichodesmium* Fe Stress Response: Development of A Field Assay to Link Gene Expression and Nitrogen Fixation Rates. P.D. Chappell, J.W. Moffett, J. Waterbury, E.A. Webb (Oral Presentation, †)

2007 The Center for Environmental BioInorganic Chemistry (CEBIC) Summer Conference, Princeton University: Exploring the Linkages between Fe Levels, Nitrogen Fixation Rates and the Expression of Fe Stress Response Genes in *Trichodesmium*. P.D. Chappell, J.W. Moffett, J. Waterbury, E.A. Webb (Oral Presentation)

2006 Ocean Sciences Meeting: Using Gene Expression to Evaluate P and Fe Stress in Sargasso Sea Populations of *Trichodesmium*. P.D. Chappell, J.W. Moffett, S. Haley, S. Dyhrman, E. Webb (Oral Presentation)

2005 ASLO Aquatic Sciences Meeting: Evaluation of *idiA* and *feoB* Gene Expression as Markers of Iron Stress in *Trichodesmium*. P.D. Chappell, J.W. Moffett, E.A. Webb (Oral Presentation)

2004 Environmental Bioinorganic Chemistry Gordon Research Conference: Characterization of Two Genes Involved in Iron Transport in *Trichodesmium*. P.D. Chappell, J.W. Moffett, E.A. Webb (Poster Presentation).

Research Papers Presented At Professional Meetings and Universities: Professional Presentations Listed as Co-Author

2024 Ocean Sciences Meeting: Seasonal Shifts in Trichodesmium Clade Distributions on the Oligotrophic West Florida Shelf. K. Confesor, A.N. Knapp, K.N. Buck, S. Caprara, C. Parente, R. Boiteau, T. Conway, H. Hunt, J. Tamborski, A. Lindgren, C.G. Smith, E.A. Webb, and P.D. Chappell (Oral, ‡)

2024 Ocean Sciences Meeting: Entrained Mississippi River Plume Shifts Phytoplankton Community Composition on the West Florida Shelf. E.E. Graves, K. Confesor, K.E. Powell, S. Caprara, K.N. Buck, and P.D. Chappell (Poster, ‡)

2024 Ocean Sciences Meeting: Seasonal Water Mass Dynamics Drive Diazotroph Community Composition and Nitrogen Fixation Rates at the Cape Hatteras Front. K.E. Crider, C.S. Selden, M.R. Mulholland, and P.D. Chappell (Poster, ‡)

2023 OCB Summer Meeting: Phytoplankton Community Composition in Relation to Physico-Chemical Gradients in the Atlantic Sector of the Southern Ocean. E. Graves, S.V. Einarsson, K.E. Powell, S. Fawcett, H. Forrer, S. Kranz, A.N. Knapp, R. Thomas, J. Rose, and P.D. Chappell (Poster, ‡)

2023 OCB Summer Meeting: Nitrogen Fixation at the Mid-Atlantic Bight Shelfbreak and Transport of Newly-Fixed Nitrogen to the Slope Sea. C.R. Selden, M.R. Mulholland, K.E. Crider, S. Clayton, A. Macias-Tapia, P. Bernhardt, D.J. McGillicuddy, Jr., W.G. Zhang, and P.D. Chappell (Poster, ‡)

2022 Ocean Sciences Meeting: Defining the realized niche of the two major clades of Trichodesmium: a study on the West Florida Shelf. K. Confesor, C. Selden, K.E. Powell, A.N. Knapp, K.N. Buck, S. Caprara, T. Mellett, and P.D. Chappell (Oral)

2022 Ocean Sciences Meeting: Phytoplankton community shifts in Alaskan Beaufort Sea upwelling: Implications for a warming Arctic. S. Einarsson, P. Lin, R. Pickart, C. Ashjian, K. Lowry, and P.D. Chappell (Oral)

2022 Ocean Sciences Meeting: Ocean physics as a driver of nitrogen fixation at the shelf-break. C. Selden, M. Mulholland, K. Crider, P. Bernhardt, A. Macias-Tapia, S. Clayton, S. Einarsson, and P.D. Chappell (Oral)

2022 Ocean Sciences Meeting: variability in diazotroph abundance and gene expression at a coastal N_2 fixation hotspot (Outer Banks, NC). K. Crider, C. Selden, K. Powell, and P.D. Chappell (Poster)

2022 Ocean Sciences Meeting: Phytoplankton community composition in relation to physico-chemical gradients in the Atlantic sector of the Southern Ocean. E. Graves, K.E. Powell, S.V. Einarsson, R. Thomas, H. Forrer, L. Haraguchi, S. Kranz, J. Rose, T. Ryan-Keogh, S. Fawcett, A.N. Knapp, and P.D. Chappell (Poster)

2022 Ocean Sciences Meeting: Field-based nitrate assimilation isotope effect estimates from the Atlantic Sector of the Southern Ocean. R. Thomas, H. Forrer, L. Haraguchi, S. Kranz, P.D. Chappell, S. Einarsson, A. Roychoudhury, T. Ryan-Keogh, S. Fawcett, and A.N. Knapp (Oral)

2022 Ocean Sciences Meeting: Trace metal cycling during phytoplankton growth: insights from shipboard incubations. K.N. Buck, S. Burns, T. Mellett, P.D. Chappell, M. Brzezinski, B.D. Jenkins, and S. Caprara (Oral)

2022 Ocean Sciences Meeting: Ammonium dynamics in the mid-Atlantic shelf break frontal zone. Y. Zhu, C. Selden, P.D. Chappell, S. Clayton, D. Mcgillicuddy, Weifeng Zhang, and M. Mulholland (Oral)

2021 CERF Virtual Meeting: Seasonal variability in diazotroph abundance and gene expression at a coastal N_2 fixation hotspot (Outer Banks, NC). K. Crider, C. Selden, K. Powell, and P.D. Chappell (Poster)

2021 OCB Virtual Meeting: Coastal upwelling enhances abundance of a symbiotic diazotroph (UCYN-A) and its host in the Arctic Ocean. C. Selden, S. Einarsson, K. Lowrey, K. Crider, R. Pickart, C. Ashjian, and P.D. Chappell (Poster)

2021 OCB Virtual Meeting: Seasonal variability in diazotroph abundance and gene expression at a coastal N_2 fixation hotspot (Outer Banks, NC). K. Crider, C. Selden, K. Powell, and P.D. Chappell (Poster)

2021 OCB Virtual Meeting: Defining the environmental niche of the two main clades of *Trichodesmium*: a study on the West Florida Shelf. K. Confessor, C. Selden, K. Powell, A.N. Knapp, K.N. Buck, L. Donahue, and P.D. Chappell (Poster)

2021 OCB Virtual Meeting: The influence of siderophores on bacteria-diatom interactions in the iron-limited Southern Ocean. R.M. Bundy, B. Jenkins, P.D. Chappell, A. Sterling, E. McDermith, L. Holland, S. Burns, K. Buck

2021 ASLO Virtual Meeting: Field-based nitrate assimilation isotope effect estimates from the Atlantic sector of the subantarctic Southern Ocean. R.K. Thomas, S. Fawcett, H. Forrer, S. Kranz, P.D. Chappell, S. Einarsson, A. Knapp (Oral)

2021 ASLO Virtual Meeting: Nitrate assimilation isotope effect estimates from incubations of natural communities in the Atlantic sector of the subantarctic under light and iron stress. J.M. Rose, R.K. Thomas, L. Haraguchi, S.V. Einarsson, H.J. Forrer, S.E. Fawcett, P.D. Chappell, A.N. Knapp, S.A. Kranz (Oral)

2021 ASLO Virtual Meeting: The influence of siderophores on bacteria-diatom interactions in the iron-limited Southern Ocean. R.M. Bundy, B. Jenkins, P.D. Chappell, A. Sterling, E. McDermith, L. Holland, S. Burns, K. Buck

2020 AGU Fall Meeting: Western boundary current instability gives rise to extraordinary subsurface diatom blooms in the Middle Atlantic Bight slope sea. H. Oliver, W.G. Zhang, W.O. Smith, P. Alatalo, P.D. Chappell, A. Hirzel, G. Packard, C. Selden, J. Poole, H.M. Sosik, R. Stanley, Y. Zhu, D.J. McGillicuddy (Poster)

2020 Ocean Sciences Meeting: Diatom Community Composition Shifts Driven by Coherent Cyclonic Mesoscale Eddies in the California Current System. Z.M. Abdala, S.V. Einarasson, K.E. Powell, C.P. Till, T.Coale, S.Clayton, P.D. Chappell (Oral Presentation)

2020 Ocean Sciences Meeting: Ammonium Dynamics in the South China Sea-Kuroshio and the Mid-Atlantic Shelf Break Frontal Zones. Y. Zhu, M. Dar, D.J. McGillicuddy, M.R. Mulholland, P.D. Chappell, S. Clayton (Poster Presentation)

2020 Ocean Sciences Meeting: Effects of water mass mixing on diazotrophy at the New England shelfbreak front. C. Selden, M.R. Mulholland, P.D. Chappell, S.Clayton, A. Macias-Tapia, P.W. Bernhardt, D.J. McGillicuddy (Oral Presentation)

2020 Ocean Sciences Meeting: Beaufort Sea Upwelling and Corresponding Shifts in the Eukaryotic Community. S.V. Einarsson, P.D. Chappell, K.E. Powell, K.E. Lowry, R.S. Pickart, C.J. Ashjian. (Oral Presentation)

2020 Ocean Sciences Meeting: Benefits and challenges of quantifying microbial gene copies in the ocean in the era of 'omics. P.Moisander, P.D. Chappell, B.D. Jenkins, K.A. Turk-Kubo (Poster Presentation)

2020 Ocean Sciences Meeting: An examination of niche separation in two primary Trichodesmium clades along the West Florida Shelf. K.Confesor, K.E. Powell, A.N. Knapp, K.N. Buck, P.D. Chappell (Poster Presentation)

2020 Ocean Sciences Meeting: The biogeochemical cycling of Fe and Fe isotopes in the Gulf of Mexico and the Gulf Stream system. T. M. Conway, B. Summers, S. Caprara, T. Mellett, R. Schlaiss, K.N. Buck, P.D. Chappell, A.N. Knapp. (Oral Presentation)

2020 Ocean Sciences Meeting: Capturing Southern Ocean diatom community response to Fe enrichment and potential interactions with bacteria using metatranscriptomics. L.Z. Holland, K.M. Gomes, K.N. Buck, P.D. Chappell, R. M. Bundy, B.D. Jenkins (Poster Presentation)

2019 Chemical Oceanography GRC: Correlated dissolved organic nitrogen and dissolved iron concentrations on the West Florida Shelf: signatures of submarine groundwater discharge and *Trichodesmium thiebautii*. A.N. Knapp, K.N. Buck, R. Boiteau, T. Conway, B. Summers, M. Charette, J. Tamborski, C. Miranda, A. McKenna, C. Selden, T. Mellett, S. Caprara, and P.D. Chappell (Poster Presentation)

2019 OCB Summer Meeting: Interannual comparison of diatom community composition in the Western Antarctic Peninsula. L.Z. Holland, A.R. Sterling, K.N. Buck, P.D. Chappell, K.R. Arrigo, A. Post, B.D. Jenkins (Poster Presentation)

2019 ASLO 2019 Aquatic Sciences Meeting: Novel observations of positively correlated dissolved organic nitrogen and dissolved iron concentrations in Gulf of Mexico surface waters. A.N. Knapp, K.N. Buck, R. Boiteau, C. Miranda, A. McKenna, Y. Corilo, S. Caprara, and P.D. Chappell (Oral presentation)

2019 ASLO 2019 Aquatic Sciences Meeting: Investigating biogeochemical feedbacks between trace metals and diatom growth: insights form Southern Ocean phytoplankton incubation experiments. S. Burns, Z. Abdala, A. Sterling, R. Bundy, P.D. Chappell, B. Jenkins, and K. Buck.

2018 OCB Summer Meeting: Comparison of bacteria recruited by axenic Southern Ocean diatoms under iron stress. L.Z. Holland, A.R. Sterling, K.N. Buck, P.D. Chappell, R.M. Bundy, B.D. Jenkins (Poster Presentation)

2018 Ocean Sciences Meeting: Diatom community composition shifts in the nitrogen-limited Mid-Atlantic Bight. Z. Abdala, S. Einarsson, K. Powell, B. Widner, P. Bernhardt, P. D. Chappell (Poster Presentation, ‡)

2018 Ocean Sciences Meeting: High and low iron upwelling and corresponding shifts in the diatom community. S. Einarsson, Z. Abdala, K. Powell, C.P. Till, P. D. Chappell (Oral Presentation, ‡)

2018 Ocean Sciences Meeting: Dissolved iron and dissolved organic nitrogen concentrations are correlated in Gulf of Mexico surface waters. A.N. Knapp, K.N. Buck, R. Boiteau, C. Miranda, A. McKenna, Y. Corilo, S. Caprara, and P.D. Chappell (Oral presentation)

2018 Ocean Sciences Meeting: Reconsidering coastal diazotrophy in the North Atlantic: high rates of N_2 fixation along the U.S. southeastern seaboard. C. Selden, P.D. Chappell, B. Widner, A. M. Tapia, P.W. Bernhardt, M.R. Mulholland. (Oral presentation, ‡)

2018 Ocean Sciences Meeting: Primary productivity and dinitrogen fixation on the North Atlantic continental shelf. M.R. Mulholland, P.W. Bernhardt, K. Hyde, A. Mannino, B. Widner, P.D. Chappell, C. Selden (Oral Presentation, ‡)

2018 Ocean Sciences Meeting: Comparison of bacteria recruited by axenic Southern Ocean diatoms under iron stress. L.Z. Holland, A.R. Sterling, K.N. Buck, P.D. Chappell, R.M. Bundy, B.D. Jenkins (Poster Presentation)

2018 Ocean Sciences Meeting: Metatranscriptomic analysis of plastid targeted genes in iron-limited Southern Ocean diatoms. K.M. Gomes, L.Z. Holland, S. Burns, R.M. Bundy, K.N. Buck, P.D. Chappell, B.D. Jenkins. (Poster Presentation)

2018 Ocean Sciences Meeting: Siderophore-producing bacteria associated with diatoms in the iron-limited Southern Ocean. A.R. Sterling, L.Z. Holland, E.J. McDermith, K.N. Buck, P.D. Chappell, R.M. Bundy, B.D. Jenkins. (Poster Presentation)

2018 Ocean Sciences Meeting: Dynamic cycling of siderophores during the growth and decline of an iron-limited phytoplankton assemblage in a Southern Ocean mesocosm experiment. R.M. Bundy, K.N. Buck, S. Burns, A.R. Sterling, L. Z. Holland, D. Repeta, P.D. Chappell, B.D. Jenkins (Oral Presentation)

2017 Chemical Oceanography Gordon Research Conference: Novel observations of correlated dissolved organic nitrogen and dissolved iron concentrations in the Gulf of Mexico. A.N. Knapp, K.N. Buck, R. Boiteau, C. Miranda, A. McKenna, Y. Corilo, S. Caprara, and P.D. Chappell (Poster Presentation)

2017 OCB Summer Workshop: Diatom community composition shifts in the nitrogen limited Mid-Atlantic Bight. Z. Abdala, S. Einarsson, K. Powell, B. Widner, P. Bernhardt, P. D. Chappell (Poster Presentation, ‡)

2017 OCB Summer Workshop: Diatom community composition through upwelling over thin and broad continental shelves. S. Einarsson, Z. Abdala, K. Powell, P. D. Chappell (Poster Presentation, ‡)

2017 OCB Summer Workshop: Subcellular proteomics for determining Fe-limited remodeling of plastids in the centric diatom *Thalassiosira pseudonana.* K.M. Gomes, B.L. Nunn, P.D. Chappell, B.D. Jenkins (Poster Presentation)

2016 OCB Summer Workshop: Diatom community composition shifts as a response to California coastal upwelling. Z. Abdala, S. Einarsson, K. Powell, J. Fitzsimmons, T. Coale, C. P. Till, P. D. Chappell (Poster Presentation, ‡)

2016 OCB Summer Workshop: Diatom community composition along Oregon Coast upwelling in relation to environmental variables. S. Einarsson, Z. Abdala, K. Powell, B. Twining, C. P. Till, T. Coale, P. D. Chappell (Poster Presentation, ‡)

2016 Ocean Sciences Meeting: A comparative gene expression analysis of iron-limited cultures of *Chaetoceros socialis* and *Pseudo-nitzschia arenysensis*using newly developed iron assays. Zuzanna M. Abdala, Kimberly Powell, Dylan P. Cronin, P. Dreux Chappell (Poster Presentation, ‡)

2016 EMBO/EMBL Symposium: Transcriptome profiling for elucidating nutritional ecology in diatoms. B.D. Jenkins, P.D. Chappell, L.P., Whitney, J.R., Wallace, and K. Gomes (Oral Presentation, ‡)

2015 Molecular Life of Diatoms Meeting: Transcriptome profiling for elucidating nutritional ecology in diatoms. B.D. Jenkins, J.R. Wallace, P.D. Chappell, and K. Gomes (Oral Presentation, ‡)

2014 Goldschmidt Conference: Diatoms living in different iron regimes in the North Pacific Ocean. B.D. Jenkins, P.D. Chappell, L.P. Whitney, J.R. Wallace, and T.N. Leigh (Oral Presentation, ‡).

2014 Joint Aquatic Sciences Meeting: A new method for following diatom taxonomy to enable genome-based studies in the environment. B.D. Jenkins and P.D. Chappell (Oral Presentation)

2014 Ocean Sciences Meeting: Optical analysis of iron deplete and replete diatom pigments. A.A. Degree, P.D. Chappell, V.J. Hill, and R.C. Zimmerman. (Poster Presentation, ‡)

2014 Ocean Sciences Meeting: Following iron limitation across ocean gradients: pairing genetic finger printing of diatom community composition with molecular indicators of iron. B.D. Jenkins, P.D. Chappell, J.R. Wallace, and L.P. Whitney. (Oral Presentation, ‡)

2013 Aquatic Sciences Meeting: Using molecular tools to assess the response to Fe availability in the diatom *Thalassiosira oceanica* from the northeast Pacific. L.P. Whitney, P.D. Chappell, B.D. Jenkins (Poster Presentation)

2013 Aquatic Sciences Meeting: Profiling nutrient limitation in Thalassiosiroid diatoms via global gene expression analysis. J.R. Wallace, B.D. Jenkins, P.D. Chappell (Poster Presentation, ‡)

2011 Ocean Sciences Meeting: From lab to launch: integrating biomarkers derived from genomics and proteomics approaches into remote observing platforms. B.D. Jenkins, T.A. Rynearson; S. T. Dyrhman, M.A. Saito, P.D. Chappell, L.P. Whitney (Oral Presentation)

2011 Ocean Sciences Meeting: A gene-based indicator of iron limitation in the diatom *Thalassiosira oceanica*. A. Darer, P.D. Chappell, B.D. Jenkins (Poster Presentation, ‡)

2010 Marine Microbes Gordon Conference. Following the complete cellular response to iron limitation in diatoms. B.D. Jenkins, P.D. Chappell, M. Mercier, T.A. Rynearson, L.B. Pritchard, J.J. Lins, S. Dyhrman, M.A. Saito. (Poster Presentation)

2006 Ocean Sciences Meeting: Molecular evidence of phosphonate utilization in *Trichodesmium*. S. Dyhrman, P.D. Chappell, S. Haley, J.W. Moffett, E. Orchard, J. Waterbury, E. Webb (Oral Presentation)