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EMPLOYMENT

- 2021–present Associate Professor, Department of Earth, Ocean and Atmospheric Science, Florida State University.
- 2014–2021 Assistant Professor, Department of Earth, Ocean, and Atmospheric Science, Florida State University.
- 2011–2014 Postdoctoral researcher, Geoscience, Trace Metal Biogeochemistry, Princeton University. Mentor: Prof. François Morel.
- 2010–2011 Postdoctoral researcher, Biogeochemistry; Project Phytochange, Alfred-Wegener-Institute Helmholtz Center for Polar and Marine Research. Mentor: Dr. Bjoern Rost.

EDUCATION

- 2010 PhD, University of Bremen; Germany and Alfred-Wegener-Institute Helmholtz Center for Polar and Marine Research; Marine biogeochemistry, phytoplankton ecophysiology. magna cum laude. Supervisor: Dr. Björn Rost
- 2006 Diploma (German), Technische Universität Kaiserslautern. Major: Biology, Plant Physiology. Supervisor: Dr. Sueltemeyer.

RESEARCH AND TEACHING INTERESTS

Oceanography	Marine Productivity
Environmental Science	Phytoplankton Ecophysiology
Climate Change	Trace Metal Biochemistry
Paleo Climate	Marine Food Web Interactions
Marine Biogeochemistry	Harmful Algae

HONORS, AWARDS, PRIZES

- Nomination for Undergraduate Research Mentor Award (by the Center for Undergraduate Research and Academic Engagement), FSU (2018).
- Nomination for Undergraduate Advising Award (by the Office of the Provost), FSU (2018).
- MEL Senior Visiting Fellowship, State Key Laboratory of Marine Environmental Science (Xiamen University) (2017). (\$3,000).
- Transformation Through Teaching Award, FSU (2016).
- Antarctica Service Medal, National Science Foundation (2013).

RESEARCH

Journal Articles *indicates graduate student author

- Borowitzka, M. A., Pueschel, C. M., Cornwall, C. E., Comeau, S., **Kranz, S. A.**, Spindel, N., & McCoy, S. (submitted). Calcification in the Coralline Red Algae: A Synthesis. *Journal of Experimental Botany*. Manuscript submitted for publication, 34 pages.
- [38] Zhang, F., Wen, Z., Wang, S., Tang, W., Luo, Ya-Wei, **Kranz, S. A.**, Hong, H., & Shi, D. (2022). Phosphorus limitation intensifies negative effects of ocean acidification on the nitrogen fixer *Trichodesmium*. *Nature Communications* (13), Article number: 6730
- [37] Yingling, N., Kelly, T., Shropshire, T., Landry, M., Selph, K., Knapp, A., **Kranz, S. A.**, & Stukel, M. (2022). Taxon-Specific Phytoplankton Growth, Nutrient Utilization, and Light Limitation in the Oligotrophic Gulf of Mexico. *Journal of Plankton Research*, 48.
- [36] Elshall, A., Ye, M., **Kranz, S. A.**, Harrington, J., Yang, X., Wan, Y., & Maltrud, M. (2022). Application-specific optimal model weighting of global climate models: A red tide example. *Climate Services*, 28, 1-13. doi:<https://doi.org/10.1016/j.cliser.2022.100334>
- [35] BOOK CHAPTER: Rokitta, S., **Kranz, S. A.**, & Rost, B. (2022). Inorganic carbon acquisition by aquatic primary producers. In S. Marbely and B. Gontero In: Blue Planet, Red and Green London, *ISTE-Wiley*, 55 p., ISBN: 9-781-78945-082-8 . (Ed.), Blue Planet, Red and Green Photosynthesis (pp. 55). Wiley.
- [34] Elshall, A., Ye, M., **Kranz, S. A.**, Harrington, J., Yang, Z., & Wan, Y. (2022). Earth system models for regional environmental management: Prospects and limitations of the current generation of CMIP6 and next generation development. *Environmental Earth Sciences*, 29.
- [33] *Bercel, T. L., & **Kranz, S. A.** (2022). Effects of spectral light quality on the growth, productivity, and elemental ratios in differently pigmented marine phytoplankton species. *Journal of Applied Phycology*, 29.
- [32] Elshall, A. S., Ye, M., **Kranz, S. A.**, Harrington, J., Yang, X., Wan, Y., & Maltrud, M. (2022). Prescreening-Based Subset Selection for Improving Predictions of Earth System Models With Application to Regional Prediction of Red Tide. *Frontiers in Earth Science*, 10, 19. doi:DOI: 10.3389/feart.2022.786223
- [31] Ingles, J., Aronson, R., Smith, C., Baco-Taylor, A., Bik, H., Blake, J., Brandt, A., Cape, M., Demaster, D., Dolan, E., Domack, E., Fire, S., Geisz, H., Gigliotti, M., Griffiths, H., Halanych, K., Havermans, C., Huettemann, F., **Kranz, S. A.**, & and others. (2021). Antarctic Ecosystem Responses following Ice Shelf Collapse and Iceberg Calving: Science Review and Future Research. *Frontiers in Marine Science*.
- [30] Chissel, E., **Kranz, S. A.**, & McCoy, S. (2021). Rhodolith holobionts are not sources of fixed nitrogen in a northeastern Gulf of Mexico patch reef. *Bulletin of Marine Science*, 22.
- [29] **Kranz, S. A.**, Wang, S., Kelly, T., Stukel, M. R., Goerike, R., Landry, M., & Cassar, N. (2020). Lagrangian studies of marine production: a multi-method assessment of productivity relationships in the California Current Ecosystem upwelling region. *Journal of Geophysical Research - Oceans*, 43. doi:doi: 10.1029/2019JC015984
- [28] Wang, S., **Kranz, S. A.**, Kelly, T., Song, H., Stukel, M., & Cassar, N. (2020). Lagrangian studies of net community production: assessing the effect of diel and multi-day non-steady state factors and vertical fluxes. *Journal of Geophysical Research: Biogeosciences*. doi:<https://doi.org/10.1029/>

- [27] Bourassa, M. A., Meissner, T., Cerovecki, I., Chang, P., Xiaolong, D., De Chiara, G., Donlon, C., Dukhovskoy, D. S., Elya, J., Fewings, M. R., Foster, R. C., T Gille, S., Haus, B., Holbach, H. M., Jelenak, Z., Knaff, J., **Kranz, S. A.**, Mazloff, M., Stukel, M., & others (FEAS limits authors). (2019). Remotely Sensed Winds and Wind Stresses for Marine Forecasting and Ocean Modeling. *Frontiers in Marine Science*, 6, 1-28.
- [26] Zhang, F., Hong, H., **Kranz, S. A.**, Shen, R., Lin, W., & Shi, D. (2019). Proteomic responses to ocean acidification of the marine diazotroph *Trichodesmium* under iron-replete and iron-limited conditions. *Photosynthesis Research*, 142, 17–34.
- [25] Luo, Ya-Wei, Shi, D., **Kranz, S. A.**, Hopkinson, B. M., Hong, H., Shen, R., & Zhang, F. (2019). Reduced nitrogenase efficiency dominates the response of the globally important nitrogen fixer *Trichodesmium* to ocean acidification. *Nature Communications*, 10:1521, 1-12.
- [24] *Bercel, T. L., & **Kranz, S. A.** (2019). Insights into carbon acquisition and photosynthesis in *Karenia brevis* under a range of CO₂ concentrations. *Progress in Oceanography*, 172, 65-76.
- [23] Van de Waal, Dedmer B., Brandenburg, K. M., Keuskamp, J., Trimborn, S., Rokitta, S., **Kranz, S. A.**, & Rost, B. (2019). Highest plasticity of carbon-concentrating mechanisms in earliest evolved phytoplankton. *Limnology and Oceanography Letters*, 4, 37-43.
- [22] Shi, D., Shen, R., **Kranz, S. A.**, Morel, F., & Hong, H. (2017). Response to Comment on "The complex effects of ocean acidification on the prominent N₂-fixing cyanobacterium *Trichodesmium*". *Science*, 357(6356), 1-2.
- [21] Hong, H., Shen, R., Zhang, F., Wen, Z., Chang, S., Lin, W., **Kranz, S. A.**, Luo, Ya-Wei, Kao, Shuh-Ji, Morel, F., & Shi, D. (2017). The complex effects of ocean acidification on the dominant N₂-fixing cyanobacterium *Trichodesmium*. *Science*, 356(6337), 527-531.
- [20] Petrou, K., **Kranz, S. A.**, Trimborn, S., Hassler, C. S., Blanco Ameijeiras, S., Sackett, O., Ralph, P. J., & Davidson, A. T. (2016). Southern Ocean phytoplankton physiology in a changing climate. *Journal of Plant Physiology*, 203, 135-150.
- [19] Young, J. N., **Kranz, S. A.**, Goldman, J. A. L., Tortell, P. D., & Morel, F. M. M. (2015). Antarctic phytoplankton down-regulate their carbon concentrating mechanisms under high CO₂ with no change in growth rates. *Marine Ecology Progress Series*, 532, 13-28.
- [18] Mackey, K. R. M., Morris, J. J., Morel, F. M. M., & **Kranz, S. A.** (2015). Response of photosynthesis to ocean acidification. *Oceanography*, 28(2), 74–91.
- [17] Eichner, M., Thoms, S., **Kranz, S. A.**, & Rost, B. (2015). Cellular inorganic carbon fluxes in *Trichodesmium*: a combined approach using measurements and modelling. *Journal of Experimental Botany*, 66(3), 749-759.
- [16] Goldman, J. A. L., **Kranz, S. A.**, Young, J. N., Tortell, P. D., Stanley, R. H. R., Bender, M. L., & Morel, F. M. M. (2015). Gross and net production during the spring bloom along the Western Antarctic Peninsula. *New Phytologist*, 205(1), 182-191.
- [15] **Kranz, S. A.**, Young, J. N., Hopkinson, B. M., Goldman, J. A. L., Tortell, P. D., & Morel, F. M. M. (2015). Low temperature reduces the energetic requirement for the CO₂ concentrating mechanism in diatoms. *New Phytologist*, 205(1), 192-201.
- [14] Young, J. N., Goldman, J. A. L., **Kranz, S. A.**, Tortell, P. D., & Morel, F. M. M. (2015). Slow carboxylation of Rubisco constrains the rate of carbon fixation during Antarctic phytoplankton blooms. *New Phytologist*, 205(1), 172-181.

- [13] Eichner, M., **Kranz, S. A.**, & Rost, B. (2014). Combined effects of different CO₂ levels and N sources on the diazotrophic cyanobacterium *Trichodesmium*. *Physiologia Plantarum*, 152(2), 316-330.
- [12] Eichner, M., Rost, B., & **Kranz, S. A.** (2014). Diversity of ocean acidification effects on marine N₂ fixers. *Journal of Experimental Marine Biology and Ecology*, 457, 199-207.
- [11] Tortell, P. D., Asher, E. C., Dicklow, H. W., Goldman, J. A. L., Dacey, J. W. H., Grzyski, J. J., Young, J. N., **Kranz, S. A.**, Bernard, K. S., & Morel, F. M. M. (2014). Metabolic balance of coastal Antarctic waters revealed by autonomous pCO₂ and Delta O₂/Ar measurements. *Geophysical Research Letters*, 41(19), 6803-6810.
- [10] Trimborn, S., Thoms, S., Petrou, K., **Kranz, S. A.**, & Rost, B. (2014). Photophysiological responses of Southern Ocean phytoplankton to changes in CO₂ concentrations: Short-term versus acclimation effects. *Journal of Experimental Marine Biology and Ecology*, 451, 44-54.
- [9] Shi, D. L., **Kranz, S. A.**, Kim, J.-M., & Morel, F. M. M. (2012). Ocean acidification slows nitrogen fixation and growth in the dominant diazotroph *Trichodesmium* under low-iron conditions. *Proceedings of the National Academy of Sciences of the United States of America*, 109(45), E3094-E3100. doi:10.1073/Pnas.1216012109
- [8] Petrou, K., **Kranz, S. A.**, Doblin, M. A., & Ralph, P. J. (2012). Photophysiological Responses of *Fragilariopsis cylindrus* (Bacillariophyceae) to Nitrogen Depletion at Two Temperatures. *Journal of Phycology*, 48(1), 127-136. doi:10.1111/J.1529-8817.2011.01107.X
- [7] **Kranz, S. A.**, Eichner, M., & Rost, B. (2011). Interactions between CCM and N₂ fixation in *Trichodesmium*. *Photosynthesis Research*, 109(1-3), 73-84. doi:10.1007/S11120-010-9611-3
- [6] **Kranz, S. A.**, Wolf-Gladrow, D., Nehrke, G., Langer, G., & Rost, B. (2010). Calcium carbonate precipitation induced by the growth of the marine cyanobacterium *Trichodesmium*. *Limnology and Oceanography*, 55(6), 2563-2569.
- [5] Levitan, O., **Kranz, S. A.**, Spungin, D., Prasil, O., Rost, B., & Berman-Frank, I. (2010). Combined effects of CO₂ and light on the N₂-fixing cyanobacterium *Trichodesmium* IMS101: A Mechanistic View. *Plant Physiology*, 154(1), 346-356. doi:10.1104/pp.110.159285
- [4] **Kranz, S. A.**, Levitan, O., Richter, K.-U., Prasil, O., Berman-Frank, I., & Rost, B. (2010). Combined effects of CO₂ and light on the N₂-fixing cyanobacterium *Trichodesmium* IMS101: Physiological responses. *Plant Physiology*, 154(1), 334-345. doi:10.1104/pp.110.159145
- [3] BOOK-CHAPTER: Ralph, P. J., Wilhelm, C., Lavaud, J., Jakob, T., Petrou, K., & **Kranz, S. A.** (2010). Fluorescence as a Tool to Understand Changes in Photosynthetic Electron Flow Regulation. In David J. Sugget, Ondrej Prasil, & Michael A. Borowitzka (Eds.), *Chlorophyll a Fluorescence in Aquatic Science: Methods and Applications* (pp. 75-89). *Chlorophyll a Fluorescence in Aquatic Sciences: Methods and Applications*. Springer
- [2] **Kranz, S. A.**, Sültemeyer, D., Richter, K. -U., & Rost, B. (2009). Carbon acquisition in *Trichodesmium*: the effect of pCO₂ and diurnal changes. *Limnology and Oceanography*, 54(3), 548-559.
- [1] Rost, B., **Kranz, S. A.**, Richter, K.-U., & Tortell, P. D. (2007). Isotope disequilibrium and mass spectrometric studies of inorganic carbon acquisition by phytoplankton. *Limnology and Oceanography Methods*, 5, 328-337.

Reports

Landry, M., **Kranz, S. A.** et al. (2022). *BLOOFINZ Cruise report*.

Ryan-Keogh, T, **Kranz, S. A.** et al. (2020). *SCALE'19 Cruise report*.

Ohman, M., & **Kranz, S. A.** (2017). *California Current Ecosystem LTER Program CCE-P1706 Cruise report*

Manuscripts in progress

Harrington Julie, Ye, Ming, **Kranz, S. A.**, *Working title: Socioeconomic impacts of red tides on Florida coastal communities.*

Kranz, S. A., Rose, Jared, Knapp, Angela: *Working title: Variability in the expression of the nitrate isotope effect caused by iron and light stress in 4 Southern Ocean phytoplankton species.*

Kranz, S. A., Rose, Jared, Baker, Margaret: *Working title: Photophysiology of 4 different Southern Ocean phytoplankton species under light and iron stress.*

Chappell, P.D. Einnarsson, Sveinn, Knapp, Angela, Kranz, S.A. *Working title: Phytoplankton species composition and isotope fractionation across Southern Ocean frontal zones.*

Kelly, T., **Kranz, S. A.**, Song, H., Karuh, M., Ohman, M., Goericke, R., & Stukel, M. *Working title: Vertical and Horizontal Export of Particulate Organic Carbon in a Sub-Mesoscale Filament.*

Kelly, T., **Kranz, S. A.**, & Stukel, M. *Working title: A Reusable Pipeline for NCP Modeling from Oxygen Argon Measurements.*

Kranz, S. A., Kelly, T., & Stukel, M. *Working title: Net community productivity in the California Current Ecosystem O₂/Ar measurements, SEASOR data analysis and physical modeling.*

McCoy, S., **Kranz, S. A.**, Huettel, M., Mason, O., *Rose, J., Cissel, E., & McCollum, S. *Working title: Seagrass Blue Carbon storage and implications for climate.*

CONTRACTS AND GRANTS

Contracts and Grants Funded

Tang, Y., Locke, B. R., Rao, Q., & **Kranz, S. A.** (Jul 2022–Jun 2023). *Purchase of a Gas Chromatography - Mass Spectrometry System to Develop a Multidisciplinary User Facility for Environmental Research*. Funded by FSU-EIEG -Equipment and Infrastructure Enhancement Grant. Total award \$59,645.

Grubbs, D., Kranz, S., Trexler, J., Breithaupt, J., Huettel, M., & Burgess, S. (Jan 2022–Jan 2022). *FSUCML real-time, continuous seawater monitoring system*. Funded by FSU-CRC-Equipment and Infrastructure Enhancement Grant. Total award \$67,493.

Kranz, S. A. (Nov 2020–Jul 2021). *Assessing the state of a Karenia brevis bloom using morphological and photophysiological cues*. Funded by Florida Fish and Wildlife consortium (FWC). (069000 530 100369). Total award \$98,000.

- Williams, H., **Kranz, S. A.**, Stukel, M., Abdullah, A., & Chen, H. (Aug 2020–Jul 2024). *Excellence in Research: Assessing the Control by Multiple Micropredators on Bacterial Communities in Estuarine Environments and Characterization of Prey Lysis Products*. Funded by NSF- Bio-Oce and Historically Black Colleges and Universities Undergraduate Program. (1948758). Total award \$929,241.
- Ye, M., **Kranz, S. A.**, & Harrington, J. (Oct 2019–Sep 2023). *Multi-Scale Exploration of Nutrient Cycles and its Socio-Economic Impacts in Coastal Areas*. Funded by NSF-Coastlines and People (CoPe) - EAGER. (Award No. (FAIN): 1939994 Prop). Total award \$297,900.
- Kranz, S. A.**, Stukel, M. (Sep 2019–Aug 2024). *Collaborative Research: Mesoscale variability in nitrogen sources and food-web dynamics supporting larval southern bluefin tuna in the eastern Indian Ocean*. Funded by NSF-Biological Oceanography. (1851347). Total award \$520,182.
- Kranz, S. A.**, & Knapp, A. (Feb 2019–Feb 2024). *Collaborative Research: Quantifying the effects of variable light and iron on the nitrate assimilation isotope effect of phytoplankton*. Funded by NSF-Chemical Oceanography. (1851113). Total award \$764,447.
- Kranz, S. A.** (Dec 2017–Dec 2018). *Developing and testing a new LED-based lighting system to assess the response of phytoplankton to light variations*. Funded by FSU-CRC-Planning Grant. (%32138). Total award \$13,000.
- Kranz, S. A.** (Sep 2017–Sep 2018). *Undergraduate Research Opportunity Fund*. Funded by FSU-UROP Program. Total award \$1,000.
- Kranz, S. A.** (Feb 2017–Jun 2017). *Provost's Faculty Travel Grant*. Funded by Faculty Travel Grant Program. Total award \$1,000.
- Kranz, S. A.** (Jan 2017–Feb 2017). *MEL Senior Visiting Fellowship*. Funded by Xiamen University, China. Total award \$3,200.
- Kranz, S. A.** (Apr 2015–Jul 2015). *Physiological Responses of the Toxic Dinoflagellate *Karenia brevis* to Climate Change*. Funded by FSU-CRC-FYAP. (Proposal #2741). Total award \$20,000.

Contracts and Grants Pending

- Chagaris, D., Rindore, R., **Kranz, S. A.**, Stukel, M., Hood, P., Hu, C., Sagarese, S., Siegfried, K., Karnauskas, M., & Switzer, T. (submitted Dec. 2022). *Operationalizing the West Florida Shelf ecosystem model and application to red tides, stock assessment, and catch advice for Gulf of Mexico reef fish*. Submitted to NOAA.
- Kranz, S. A.** (submitted Nov. 2022). *Karenia brevis - investigating mixotrophic capabilities under nutrient stress*. Submitted to Florida Fish and Wildlife consortium Research Institute.

FIELD RESEARCH AND RESEARCH CRUISES

- 2022 Research cruise (70 days)- Indian Ocean; NSF award 1851347 to Kranz; Project Title: *Collaborative Research: Mesoscale variability in nitrogen sources and food-web dynamics supporting larval southern bluefin tuna in the eastern Indian Ocean.* FSU
- 2019 Research cruise (50 days) - Southern Ocean; NSF award 1851113 to Kranz; Project Title: *Collaborative Research: Quantifying the effects of variable light and iron on the nitrate assimilation isotope effect of phytoplankton.* FSU – University of Cape Town
- 2017 Research cruise (30 days)- California Current Ecosystem (CCE); *CCE Long Term Ecological Research (LTER) Process Cruise.* FSU - Scripps collaboration.
- 2012 Research station (90 days) - Palmer Station Antarctica; NSF award: 1043593 to F. M. M. Morel; Project Title *Collaborative Research: The seasonal dynamics of CO₂, primary production, and DMS in the Western Antarctic Peninsula: Measurements of pools and processes using mass spectrometry*
- 2010 Research cruise ANT-XXVII/1 (30 days)– Bremerhaven-Cape Town. *Underway sampling of phytoplankton communities, setup and testing of a flow-through MIMS prototype system, setup of a plankton incubation array and trace-metal clean-room.*
- 2008 Research station Cape Verde Islands (40 days); Collaborator with Prof. Julie LaRoche, PI, IFM Geomar, Kiel, Germany; Prof. Ilana Berman-Frank, Co-PI, Bar Ilan University, TelAviv, Israel; Project: *Identification of diazotrophs and phytoplankton communities and their responses on nutrient addition at different CO₂ concentrations”*,
- 2007 Teaching cruise North Sea (3 days) – Instructor role: teaching of undergraduate and graduate students on general oceanographic sampling instrumentation.

TECHNOLOGY DEVELOPMENT

- Kranz, S. A. (2020). *Development of a multispectral Arduino based light detector for underwater light measurements.*
- Kranz, S. A. (2019). *Development of a modular, cheap and easy to transport temperature controlled light incubator for phytoplankton microcosm experiments.*
- Kranz, S. A. (2018). *Development of a modular LED lighting system to mimic the natural variability of light in the marine environment.*

PRESENTATIONS

Invited Keynote and Plenary Presentations at Conferences

- Kranz, S. A. (2022, July). *Environmental and evolutionary context for CCMs.* The 10th International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms. Plenary presentation at the meeting of The International Society of Photosynthesis Research, Princeton, NJ, USA.
- Kranz, S. A. (2020). *The effect of light spectrum on CCM functions in diverse phytoplankton cultures.* Keynote presentation to be given at Carbon concentration mechanism in aquatic organisms (CCM11), CCM, Princeton, NJ. (Cancelled due to COVID-19)

- Kranz, S. A. (2019, May). *Photosynthesis in the marine environment -lessons learned, future challenges and opportunities*. Keynote presentation at 36th Eastern Regional Photosynthesis Conference, Eastern Regional Photosynthesis Conference, Woods Hole.
- Rost, B., Kranz, S. A., & Eichner, M. (2011). *Interactions and limitations of CO₂ and N₂ fixation in Trichodesmium*. Keynote presentation at 111th General Meeting American Society for Microbiology, American Society for Microbiology, LA, USA.
- Kranz, S. A., Levitan, O., Berman-Frank, I., & Rost, B. (2010). *CO₂-dependend energy allocation in Trichodesmium*. Keynote presentation at VIIth International Symposium on Inorganic Carbon Utilization, Aquatic Photosynthetic Organisms, Japan.

Invited Lectures

- Kranz, S. A. (2023, March). *Phytoplankton biogeochemistry in a dynamic environment explored from multiple perspectives*. Invited to Scripps Institution of Oceanography in 2023.
- Kranz, S. A. (2022, November). *The Science Behind Red Tides – Understanding The Organism As A Key To Mitigate Its Impact On Our Communities*. Delivered at Environmental Service Program @ FSU.
- Kranz, S. A. (2021, September). *Phytoplankton Ecology and Environmental Change — Life in a dynamic environment explored from multiple perspectives*. Delivered at UNC-CH's Department of Earth, Marine, and Environmental Sciences, Chapel Hill.
- Kranz, S. A. (2020, March). *Florida's red tide - a short story about the science of a tiny but deadly organism*. Delivered at Thomasville library. . (Cancelled due to COVID-19)
- Kranz, S. A. (2019, February). *Tiny, Beautiful, toxic: red tides*. Delivered at Waterworks Science Salon- Tallahassee, Waterworks, Tallahassee.
- Kranz, S. A. (2019, January). *The science behind red tides – Understanding the organism as a key to mitigate its impact on our communities*. Delivered at FSU, FSUCML Conservation Lecture Series.
- Kranz, S. A. (2018, September). *The light and dark side of red tides: a physiological perspective on how cellular photosynthesis and carbon acquisition can lead to sustained blooms of Karenia brevis*. Delivered at FSU-Ecology and Evolution seminar.
- Kranz, S. A. (2017, April). *Constraints on marine productivity – the complex effects of CO₂, pH, Fe and/or temperature on phytoplankton physiology*. Delivered at Duke University, Presentation in the School of Environmental Science (Duke) / Cassar Lab.
- Kranz, S. A. (2017, January). *Membrane inlet mass spectrometry to assess physiological parameters in phytoplankton*. Delivered at State Key Laboratory of Marine Environmental Science- College of the Environment and Ecology, Xiamen University.
- Kranz, S. A. (2016, April). *Biochemical constraints on marine productivity - limitations, trade-offs and climate change*. Delivered at FSU, Coastal and Marine Research Initiative Seminar Series.

- Kranz, S. A. (2016, April). *Biochemical constraints on marine productivity in polar regions - understanding limitations and trade-offs in physiological pathways*. Delivered at FSU, EOAS Department.
- Kranz, S. A. (2016, February). *Phytoplankton in a changing world - from cellular processes to global impact*. Delivered at University of Georgia Athens - Department of Marine Science, Athens, Department Seminar.
- Kranz, S. A. (2016, January). *Sensitivity of marine phytoplankton to climate change - physiological mechanisms and biogeochemical implications*. Delivered at FSU - Department of Biology, Ecology and Evolution Lecture Series.
- Kranz, S. A., Young, J. N., Goldman, J. A. L., Tortell, P. D., & Morel, F. M. M. (2014, May). *Physiological adaptation of Phytoplankton to cold temperatures and its influence on biogeochemical cycles*. Delivered at Alfred-Wegener-Institute, Department of Marine Biogeoscience, Bremen, Germany.
- Kranz, S. A. (2014, February). *Phytoplankton in a changing ocean. Physiological responses of tropical N₂ fixing cyanobacteria and Antarctic diatoms*. Delivered at University of Virginia, Department of Environmental Sciences, VA, USA.
- Kranz, S. A. (2014, February). *Phytoplankton in a changing ocean: Physiological responses of tropical N₂ fixing cyanobacteria and Antarctic diatoms*. Delivered at Florida State University, Department of Earth, Ocean and Atmospheric Science, FL, USA.
- Young, J. N., Kranz, S. A., Goldman, J. A. L., Tortell, P. D., & Morel, F. M. M. (2014). *Physiological mechanisms supporting high net primary productivity in the coastal Western Antarctic Peninsula*. Delivered at Rutgers University, Department of Environmental Science, NJ, USA.
- Kranz, S. A. (2011, January). *Trichodesmium - a diazotroph in a changing world*. Delivered at Princeton University, Department of Geosciences, NJ, USA.
- Kranz, S. A., Wolf-Gladrow, D., Nehrke, G., Langer, G., & Rost, B. (2011). *Calcium carbonate precipitation by the marine cyanobacterium Trichodesmium*. Delivered at Max Planck Institute for Marine Microbiology Bremen, Bremen, Germany.
- Kranz, S. A., Richter, Klaus-Uwe, & Rost, B. (2008). *Effect of global change on the N₂-fixing cyanobacteria Trichodesmium*. Delivered at Centre for Water and Waste Technology School of Civil and Environmental Engineering, Sydney, Australia.
- Kranz, S. A., Richter, Klaus-Uwe, & Rost, B. (2008). *Trends in environmental research - new approaches to assess responses of phytoplankton to global change - using the example of Trichodesmium*. Delivered at University of Technology Sydney, Department of environmental science, Sydney, Australia.

Chair of a Symposium

Kranz, S. A. (Chair) (2022, July) *The 10th International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms - Session: Environmental and evolutionary context for CCMs*. Symposium conducted at the meeting of The International Society of Photosynthesis Research, Princeton, NJ.

Kranz, S. A., Knapp, A., & Mohr, W. (Chair) (2018, February) *Ocean Science Meeting, Session: New Insights into Marine N₂ Fixation: From Single Cells to Ecosystems*. Symposium conducted at the meeting of ASLO, Portland.

Conference Presentations

Elshall, A. S., Ye, M., Kranz, S. A., Harrington, J., Yang, X., Wan, Y., & Maltrud, M. (2021, December). *Machine learning for red tide prediction in the Gulf of Mexico along the West Florida Shelf*. Presentation at AGU 2021 Fall Meeting, AGU, New Orleans, LA.

Kranz, S. A., Knapp, A., Thomas, R., & Rose, J. (2022, July). *Investigating the Impacts of Iron and Light on Nitrate and Carbon Acquisition by two Southern Ocean Phytoplankton Species – An Isotope Approach*. In Dr. Martin Jonikas (Chair), *Utilization by Aquatic Photosynthetic Organisms- Session: Environmental and evolutionary context for CCMs*. Poster presentation at the meeting of The International Society of Photosynthesis Research, Princeton, NJ.

Thomas, R. K., Fawcett, S. E., Forrer, H. J., Kranz, S. A., Chappell, P. D., Einarsson, S. V., & Knapp, A. N. (2021). *Field based nitrate assimilation isotope estimates from the Atlantic sector of the Southern Ocean*. Presentation submitted for approval.

Thomas, R., Fawcett, S. E., Forrer, H., Kranz, S. A., Chappell, P. D., Einarsson, S., & Knapp, A. N. (2021). *Field-based nitrate assimilation isotope effects estimates of the Atlantic sector ion the Subantarctic Southern Ocean* Presentation at the meeting of Association for the Society of Limnology and Oceanography. .

Graves, E. E., Einarsson, S. V., Powell, K. E., Fawcett, S. E., Forrer, H. J., Kranz, S. A., Knapp, A. N., Thomas, R. K., & Chappell, P. D. (2021). *Phytoplankton Community Composition in relation to physicochemical gradients in the Atlantic Sector of the Subantarctic and Antarctic*.

Chappell, P. D., Graves, E., Einarsson, S. V., Powell, K. E., Thomas, R. K., Forrer, H. J., Fawcett, S. E., Knapp, A. N., & Kranz, S. A. (2021). *Phytoplankton Community Responses to Iron and Light Stress in the Atlantic Sector of the Subantarctic and Antarctic*.

Thomas, R., Fawcett, S. E., Forrer, H., Kranz, S. A., Chappell, P. D., Einarsson, S., & Knapp, A. N. (2021). *Field-based nitrate assimilation isotope effects estimates of the Atlantic sector ion the Subantarctic Southern Ocean*. Presentation at Aquatic Science meeting 2021, Association for the Society of Limnology and Oceanography, Virtual (Spain).

- Rose, J., Thomas, R., Haraguchi, L., Einarsson, S., Forrer, H., Fawcett, S. E., Chappell, P. D., Knapp, A. N., & Kranz, S. A. (2021). *Nitrate Assimilation Isotope effect estimates from incubations of natural communities in the Atlantic sector of the subantarctic under light and iron stress*. Presentation at Aquatic Science meeting 2021, Association for the Society of Limnology and Oceanography, (Virtual) Spain.
- Chappell, P. D., Graves, E., Powell, K. E., Einarsson, S. V., Thomas, R. K., Forrer, H. J., Fawcett, S. E., Knapp, A. N., & Kranz, S. A. (2021). *Phytoplankton Community Responses to Iron and Light Stress in the Atlantic Sector of the Subantarctic and Antarctic*. Presentation at Ocean Science Meeting 2021, Association for the Society of Limnology and Oceanography, (Virtual) Spain.
- Kelly, T. B., Goerike, R., Ohman, M., Song, H., Kranz, S. A., Landry, M., & Stukel, M. (2020, February). *Investigating the biogeochemical impact of an across-shore filament*. Presentation at Ocean Science Meeting, ASLO, AGU, San Diego.
- Yingling, N., Kelly, T. B., Selph, K., Landry, M., Knapp, A., Kranz, S. A., & Stukel, M. (2020, February). *Phytoplankton nutrient uptake, size structure and biomass distribution in the spawning region of Atlantic Bluefin Tuna in the oligotrophic Gulf of Mexico*. Presentation at Ocean Science Meeting 2020, ASLO, AGU, San Diego.
- Kranz, S. A., Kelly, T. B., Wang, S., Cassar, N., & Stukel, M. (2020, February). *Productivity and Export along an Upwelling Filament in the California Current Ecosystem using a Multi Method Approach*. Presentation at Ocean Science Meeting 2020, ASLO, AGU, San Diego.
- McCoy, S., Pueschel, C., Kranz, S. A., Cornwall, C., Comeau, S., & Borowitzka, M. (2020). *Calcification in the Coralline Algae: A Synthesis and Conceptual Model*. Presentation at Ocean Science Meeting, ASLO, AGU, San Diego.
- Kelly, T. B., Goericke, R., Ohman, M. D., Song, H., Kranz, S. A., Landry, M., & Stukel, M. R. (2020). *Investigating the biogeochemical impact of an across-shore filament*. Presentation at Ocean Sciences Meeting, American Geophysical Union, San Diego, CA.
- Bercel, T., & Kranz, S. A. (2019, May). *The suitability of different commercially available growth lights for studies on phytoplankton ecophysiology – a proof of principle study*. Presentation at 36th Eastern Regional Photosynthesis Conference, Eastern Regional Photosynthesis Conference.
- Kranz, S. A., Kelly, T., Wang, S., Stukel, M., & Cassar, N. (2018, June). Net Community Production and Plankton Dynamics in the CCE-LTER. In Mark Ohman (Chair), *Forum on Cross-shore fluxes in the CCE-LTER*. Presentation at Scripps, San Diego.
- Kranz, S. A. (2018, June). Phytoplankton physiology meets biogeochemistry: small scale processes in the limelight of global biogeochemical cycles. In Francois Morel (Chair), *Francois Morel Retirement celebration*. Poster presentation at the meeting of Princeton University, Princeton University, Princeton, NJ.

- Bercel, T., & Kranz, S. A. (2018, February). *Advancing our understanding of light quality on phytoplankton productivity using LEDs - implications for modeling based on laboratory experiments*. Presentation at Ocean Science meeting, American society of Limnology and Oceanography, Portland
- Kranz, S. A., & *Bercel, T. (2017, January). *CO₂ effects on the marine dinoflagellate *Karenia brevis* - carbon acquisition and photophysiology*. Presentation at Xiamen Symposium on Marine Environmental Sciences (XMAS) - The Changing Ocean Environment: From a Multidisciplinary Perspective, State Key Laboratory of Marine Environmental Science (MEL) of Xiamen University, Xiamen, China.
- Kranz, S. A., & *Bercel, T. (2016, August). *Photosynthesis and carbon acquisition of the red-tide dinoflagellate *Karenia brevis* under ambient and elevated CO₂ concentrations*. Poster presentation at The IXth International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms, CCM International Scientific Committee, Cambridge, UK.
- Kranz, S. A., Young, Jodi, N., Goldman, J., Tortell, P., & Morel, Francois, M.M. (2016). *Antarctic Phytoplankton down-regulate Their Carbon-Concentrating Mechanisms under High CO₂ with no Change in Growth Rates*. Poster presentation at Ocean Sciences Meeting, ASLO / AGU, New Orleans.
- Eichner, M., Kranz, S. A., Morel, F. M. M., & Rost, B. (2015, May). *Cellular inorganic carbon fluxes in the diazotroph *Trichodesmium* under different nitrogen sources and pCO₂ levels* *The VIIIth International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms (CCM8)*. Presentation at The VIIIth International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms (CCM8), CCM, New Orleans.
- Eichner, M. J., Kranz, S. A., Thoms, S., & Rost, B. (2015, February). *Physiology of a N₂-fixer under ocean acidification - the roles of internal carbon cycling and energy allocation*. Presentation at Aquatic Sciences Meeting, ASLO, Granada, Spain.
- Kranz, S. A., Tortell, P., & Morel, F. M. M. (2014). *Inorganic carbon acquisition of phytoplankton during a spring bloom*. Poster presentation at Ocean Sciences Meeting, ALSO, TSO, AGU, Hawaii, USA.
- Kranz, S. A., Young, J. N., Goldman, J. A. L., Tortell, P., & Morel, F. M. M. (2013). *Carbon acquisition of Southern Ocean phytoplankton in the Western Antarctic Peninsula: Response to natural and experimental CO₂ gradients*. Poster presentation at The VIIIth International Symposium on Inorganic Carbon Utilization, Aquatic Photosynthetic Organisms, New Orleans, USA.

- Kranz, S. A., Eichner, M., Morel, F. M. M., & Rost, B. (2013). *Cellular inorganic carbon fluxes in the diazotroph Trichodesmium under different nitrogen sources and pCO₂ levels*. Poster presentation at The VIIIth International Symposium on Inorganic Carbon Utilization, Aquatic Photosynthetic Organisms, New Orleans, USA.
- Kranz, S. A., Eichner, M., & Rost, B. (2012). *Combined effects of different CO₂ levels and N sources on Trichodesmium*. Presentation at Third Symposium on the Ocean in a High CO₂ World, SCOR, IOC, and IGBP, Monterey, USA.
- Kranz, S. A., Wolf-Gladrow, D., Nehrke, G., Langer, G., & Rost, B. (2011). *Calcium Carbonate Precipitation by the marine cyanobacterium Trichodesmium*. Presentation at Goldschmidt, Geochemical Society and the European Association of Geochemistry, Prague, Czech Republic.
- Kranz, S. A., Eichner, M., & Rost, B. (2011). *Ocean acidification responses of a N₂-fixing cyanobacterium - mechanisms and implications*. Presentation at Youmares 2nd German Young Marine Scientist Meeting, Working Group Studies and Education of the German Society for Marine Research, Bremerhaven.
- Kranz, S. A., Eichner, M., Levitan, O., Berman-Frank, I., & Rost, B. (2010). *CO₂-dependent energy allocation in Trichodesmium*. Poster presentation at BIOACID / EPOCA / UKOARP Meeting, BIOACID and UKOARP, Bremerhaven, Germany.
- Kranz, S. A., Rost, B., & Richter, Klaus-Uwe. (2010). *New approaches to assess the responses of phytoplankton to global change*. Presentation at "Polar Processes II", AWI-IUP seminar, Bremen, Germany.
- Kranz, S. A., Levitan, O., Berman-Frank, I., & Rost, B. (2009). *CO₂ and light effects on growth, photosynthesis, carbon acquisition and nitrogen fixation of the diazotrophic cyanobacteria Trichodesmium*. Presentation at Aquatic Science Meeting, Association for the Sciences of Limnology and Oceanography, Nice, France.
- Kranz, S. A., Trimborn, S., Sweet, E., Petrou, K., Tortell, P. D., Payne, C. D., Li, Y., Richter, Klaus-Uwe, & Rost, B. (2009). *Effects of CO₂ on growth, photosynthesis and carbon acquisition of key diatom species of the Southern Ocean*. Presentation at Aquatic Science Meeting, Association for the Sciences of Limnology and Oceanography, Nice, France.
- Kranz, S. A., Sültemeyer, D., & Rost, B. (2007). *CCM regulation in Trichodesmium: diurnal rhythm and effect of pCO₂*. Poster presentation at The VIth International Symposium on Inorganic Carbon Utilization, Aquatic Photosynthetic Organisms, Malaga, Spain.
- Kranz, S. A., Ralph, P. J., Richter, Klaus-Uwe, & Rost, B. (2007). *Integration of Fluorescence and Mass Spectrometry*. Poster presentation at Chlorophyll Fluorescence in Aquatic Sciences Meeting, Association for the Sciences of Limnology and Oceanography, Nove Hardy, Czech Republic.

Membership in Professional Organizations

Association for the Sciences of Limnology and Oceanography

TEACHING

Courses taught

Florida State University (2014-2022)

Introduction to Environmental Science (EVR1001)

Basic Biological Oceanography (OCB5050)

Marine Primary Production (OCB5565)

Princeton University (2013 & 2014):

The Everglades Today and Tomorrow: Global Change and the Impact of Human Activities on the Biosphere (FRS114)

Course Development

Environmental Science Virtual Lab course

Marine Primary Production - Laboratory sub-section

Introduction to Environmental Science

Basic Biological Oceanography

Marine Primary Production

Curriculum Development

Marine Science/Biology Major

ADVISING

Doctoral Committee Chair

Bercel, T., graduate. (2021). *Ecophysiology of the Dinoflagellate Karenia brevis under Ocean Acidification*. [start August 10, 2015]

Rose, J., doctoral student. *Photophysiology in Southern Ocean phytoplankton*.

Master's Committee Chair

Barber, B., graduate. (2019). *Evaluating the sensitivity of phytoplankton productivity to dynamic light environments*.

Bercel, T., graduate. (2018). *Light effects on the growth and productivity of phytoplankton*.

Margaret Baker, student. *Assessing the physiology of Antarctic "sleeping beauties; Antarctic diatoms in a fall-winter-spring transition*.

Rose, J., student. *Nitrogen isotopes in phytoplankton - the effect of light and Iron*.

Bachelor's Committee Chair/Co-Chair

Silva, A., graduate. (2019). *Development of a mass spectrometry application to measure inorganic carbon fluxes in Thalassia*. (unfinished)

- Danyuk, Y., graduate. (2017). *Honor's thesis: Ecophysiology of the toxic diatom Pseudo-Nitzschia. Effects of light, CO₂ and nutrients on growths, photosynthesis and C-acquisition as well as N isotopic signature.*
- Owen, D., graduate. (2015). *Acclimation of Red Tide Dinoflagellate Karenia Brevis to Higher Temperatures Results in Abnormal Morphology and Changes in Growth Rates.* [PI: Keller (Bio) Honors thesis conducted in the Kranz lab under direct supervision]

Doctoral Committee Member

- Thomas, R., graduate. (2021). *Nitrogen isotopes in the Southern Ocean.* PI: Knapp
- Mejia-Mercado, B. E., graduate. (2021). *Structure of the deep-sea fish assemblages on the Necker Island seamount.* PI: Baco-Taylor
- Cruz, J., graduate. (2020). *Biostratigraphy in the Indian Ocean: Bengal Fan- Evolution of the Himalayan and Tibetan region.* PI: Wise
- Shropshire, T., graduate. (2020). *Food limitation experienced by larval fish in the Gulf of Mexico.* PI: Stukel
- Kelly, T., graduate. (2019). *The biological carbon pump - measurements and numerical modeling.* PI: Stukel
- Merikhi, A., graduate. (2018). *Oxygen flux measurements at the shallow seafloor using a newly developed multi sensor aquatic eddy covariance instrument.* PI: Huettel
- Ebling, A., graduate. (2016). *Biogeochemistry of Trace Elements in the Sea Surface Microlayer*
PI: Landing
- Liang, Z., doctoral candidate. *Regionally variable contribution of dissolved organic phosphorus to marine net community production.* PI: Knapp
- Forrer, H., doctoral student. *The island mass effect and its influences on carbon export in the Subantarctic and subtropical oceans.* PI: Spencer/ Stukel
- Howe, K., doctoral student. *Genomic analysis of deep sea bacterial communities in the Gulf of Mexico.* PI: Mason
- Fender, C., doctoral student. *Investigating Particle Size-Flux Relationships and the Biological Pump Across a Range of Plankton Ecosystem States From Coastal to Oligotrophic.* PI: Stukel
- Yingling, N., doctoral student. *Phytoplankton productivity and nutrient uptake in the oligotrophic Gulf of Mexico.* PI Stukel

Doctoral Committee University Representative

- Shull, S., doctoral student. *Sponges interactions.* PI: Wulff

Master's Committee Member

- Irving, J. P., graduate. (2023). *Using Lagrangian Model Simulations to Quantify the Sequestration Time of Remineralized CO₂ in the California Current Ecosystem for Different Carbon Flux Pathways.* PI: Stukel

- Kehinde, O., graduate. (2023). *Lateral advection of organic matter in the eastern Indian Ocean, and its role in supporting new production*. PI: Stukel
- Sogluizzo, A., graduate. (2023). *Seasonality in Holobiont Photophysiology Across Latitude*. PI: Brooke
- Simpson, E., graduate. (2022). *Submerged megaripples as sites of enhanced remineralization and nutrient retention*. PI: Dr. Huettel
- Fender, C., graduate. (2022). *Investigating Particle Size-Flux Relationships and the Biological Carbon Pump Across a Range of ecosystem States from Coastal to Oligotrophic*. PI: Stukel
- Petet, R., graduate. (2019). *Impacts of Microbial Community Structure on Denitrification Rates in the Rhizosphere of *J. Roemerianus* and *S. Alterniflora* in a Gulf of Mexico Mixed Marsh*. PI: Mason
- O'Halloran, C., graduate. (2019). *Caribbean Sponge growth and recruitment in reef and mangrove ecosystem*. PI: Wulff
- Canter, E., graduate. (2017). *Effects of Protozoan Predators on Aquatic Microbial Assemblages in *Sarracenia Purpurea* Leaves*. PI: Mason
- Luzader, R., graduate. (2017). *Assessing Connectivity of *Halimeda* spp on Pulley Ridge Mesophytic Reefs*. PI: Baco-Taylor
- Chen, Tz-Chian, student. *Carbon export*. PI: Stukel
- Payne, P., student. *Bacteria community and environmental drivers in coastal wetlands*. PI: Mason

Supervision of Student Research Not Related to Thesis or Dissertation

- | | |
|---------------------------------------|-----------------------------------|
| Angelique Kremer (Aug 2022–present) | Fletcher, T. (Jan 2018–Jan 2019) |
| Ava Trail (Aug 2022–present) | Morales, L. G. (Aug–Dec 2018) |
| Benjamin Alboucrek (Aug 2022–present) | Goldstein, A. (Aug 2017–Jul 2018) |
| Benten Jaco (Aug 2022–present) | Hodapp, A. (Aug 2017–May 2018) |
| Jacqueline Carr (Aug 2022–present) | Mogavero, T. (Jan 2017–Jan 2018) |
| Hodapp, A. (May 2020–present) | Danyuk, Y. (Jan 2016–May 2017) |
| Hartz, N. (Aug 2019–May 2020) | Boronek, J. (Feb–Sep 2016) |
| Hodapp, A. (Jun 2018–Aug 2019) | Wohlgemuth, K. (Jan–Aug 2016) |
| Gerad, B. (Aug 2018–May 2019) | Knight, P. (Jan–May 2016) |
| Henson, A. (Aug–Mar 2019) | Corbett, D. (Jan–Dec 2015) |
| Silva, A. (Jan 2018–Feb 2019) | Ferguson, K. (Jan–May 2015) |

High School student supervision

- Richardson, R. (2017–2018) *High school student intern from Rickards High School*.
- Weaver, S. (2017–2018) *High school student intern from Leon High*.

Middle School student supervision

- Weaver, A. (2017–2018) *Student intern from Montford Middle school*.

SERVICE

Reviewer for Refereed Journals

Algae, Aquatic Microbial Ecology, Biogeosciences (BG), Biogeosciences, Environmental, Microbiology and Environmental Microbiology Reports, Environmental Pollution, Environmental Science and Pollution Research, FEMS Microbiology Ecology, Frontiers Marine Science, Frontiers Microbiology, Global Biogeochemical Cycles, Global Change Biology, ISMEJ, JGR Oceans, Journal of Experimental Botany, Journal of Experimental Marine Biology and Ecology, Journal of Geophysical Research – Biogeosciences, Journal of Phycology, Limnology and Oceanography, Limnology and Oceanography Letters, Marine Chemistry, Marine Ecology Progress Series, Marine Environmental Research, Microbiology Reports, Nature Climate Change, Nature communications, Nature Communications Biology, New Phytologist, Plant Physiology, Science of the Total Environment

Reviewer or Panelist for Grant Applications

NSF Chemical Oceanography, NSF Biological Oceanography, National Science Foundation PLR – Antarctic organisms and ecosystems, NASA Postdoctoral Fellowship, Dutch Research Council, EUROFLEETS, Rhode Island Sea Grant College Program, NERC (Natural Environment Research Council, England)

FSU University Service

Faculty member, Truman scholarship committee (2022–present)

Faculty member, Gypstax Safety Committee (2022–present)

Faculty Member- Department representative, Academic Honor Policy Hearing Panel (2018)

FSU College Service

Member, Research Faculty search FSUCMS Marine/Coastal Scientist (2017–2018)

FSU Department Service

Member, Hiring committee “Radar and Mesoscale/Synoptic Meteorology” (2022–2023)

Member, Member DEI committee (2021–present)

Member / EOAS representative, Member of the Search Committee for a Coastal and Marine Researcher at the FSUCML (2017–present)

EOAS representative, FSU lab coat program (2017–present)

Member, EOAS Lab-fee committee (2016–present)

Member, EOAS web-page presentation (2016–present)

Member, Environmental Science Curricular Committee (2014–present)

Service to Professional Associations

Member of the CCM Steering Committee, CCM International Scientific Advisory Committee has invited me to join the CCM Steering Committee for the present and future editions of the symposium, CCM International Scientific Committee (2016–present)

Community Activity

Outreach at FSU-Coastal and Marine Laboratory open house, inform the public about research performed at FSU, red tides and light in the ocean (2022)

Presenter, Enlightening Bites lecture series, Outreach event - presentation on the biology and socioeconomic impacts of the red-tide dinoflagellate *Karenia brevis*, Thomasville Library, GA - (cancelled due to COVID outbreak)

Presenter, Presentation on "Research in Antarctica" to 20 Kindergarten children, DeSoto Trail Elementary School (2020)

Outreach at FSU-Coastal and Marine Laboratory open house, inform the public about research performed at FSU, red tides and light in the ocean (2019)

Presenter, Presenter as outreach for pre-school kids about science in Antarctica, Wildwood preschool, Tallahassee (2019)

Interviewee, Newsweek Interview (2018)

Interviewee, WJHG, TV-Interview - Red Tide (2018)

Interviewee, WTXL, TV-interview- Red tides (2018)

Mentor for Students, Mentoring of 3 students from LC schools, Leon County School district (2017–2018)

Interviewee, Interview to comment on a Nature journal article on Ocean Acidification (2017)

Interviewee, Radio interview on a Nature Geo article by. D. Hutchins (2015)

Presenter, Presentation on "Research in Antarctica" to Princeton, NJ Riverside elementary school, (2013)

Consultation

Magnegas, St., Petersburg, FL. consultation on environmental effects of water removal from cyanobacteria affected lakes in Florida (2019)

Tallahassee Aquaponics. Visiting the Aquaponics facility and discussion efficient nutrient cycling. Giving feedback on research grant proposal (2015)