Jeffrey W. Krause Curriculum Vitae

EMPLOYMENT & CONTACT INFORMATION:

Dauphin Island Sea Lab OFFICE PHONE: (251) 861-2141 x7577

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WEBSITES: (click links)

<u>Dauphin Island Sea Lab</u> <u>University of South Alabama</u> <u>Google Scholar</u>

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EDUCATION:

Ph.D., Oceanography, College of Oceanic & Atmos. Sci., Oregon State University (2008) **B.S.**, Marine Science, Southampton College of Long Island University (2003)

EMPLOYMENT HISTORY:

Professor – School of Marine & Environmental Science, University of South Alabama (2022 – present) **Senior Marine Scientist III** – Dauphin Island Sea Lab (2022 – present)

Adjunct Faculty – Department of Biological Sciences, University of Alabama (2014 – 2016, 2020 - present)

Associate Professor – Department of Marine Science, University of South Alabama (2019 – 2022)

Senior Marine Scientist II – Dauphin Island Sea Lab (2018 – 2021)

Assistant Professor – Department of Marine Science, University of South Alabama (2013 – 2019)

Senior Marine Scientist I – Dauphin Island Sea Lab (2012 – 2018)

Assist. Res. Biologist – Marine Science Institute, University of California Santa Barbara (2012 – 2018)

Post-doctoral Scholar – Marine Science Institute, University of California Santa Barbara (2008 – 2011)

Guest Scientist/ Teaching Assistant – Bermuda Biological Station for Research (Spring 2006)

Graduate Research Assistant – Oregon State University (2003 – 2008)

Research Technician – Southampton College Long Island University (2003)

Microbiology Laboratory Assistant – Southampton College Long Island University (2002 – 2003)

CURRENT FUNDED RESEARCH:

- "Quantifying the effect of sediment microbial activity in facilitating silica sequestration during early diagenesis (QUALIFIED, supplement)." National Science Foundation: Chemical Oceanography and Biological Oceanography. Jan. 2024 Dec. 2026. \$142,600. PI: Krause, J.W., Kiel Reese, B.
- "Quantifying the effect of sediment microbial activity in facilitating silica sequestration during early diagenesis (QUALIFIED)." National Science Foundation: Chemical Oceanography and Biological Oceanography. Jan. 2024 Dec. 2026. \$975,767. PI: Krause, J.W., Kiel Reese, B.
- "Using Optical and Metabolomic Approaches to Predict the Nutritional Quality of Plankton Communities for Shellfish Consumption Under Multi-Stressor Climate Conditions." Alabama Center of Excellence. Jan. 2022 Dec. 2024. \$421,757. PI: Krause, J.W., Robertson, A., Hoadley, K.D.

PAST RESEARCH AWARDS:

- "COLLABORATIVE RESEARCH: Understanding substrate limitation and Lithium and Silicon isotope fractionation during secondary clay formation in marine systems (supplement)." National Science Foundation: Chemical Oceanography and Marine Geology/Geophysics. Jan. 2020 Dec. 2024. \$82,892. PI: Krause, J.W., Wang, X.
- "COLLABORATIVE RESEARCH: Understanding substrate limitation and Lithium and Silicon isotope fractionation during secondary clay formation in marine systems." National Science Foundation: Chemical Oceanography and Marine Geology/Geophysics. Jan. 2020 Dec. 2024.

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- \$583,789. PI: Krause, J.W., Wang, X. Part of Collaborative Research Project, led by Krause, with Y. Tang (Georgia Institute of Technology, \$338, 896).
- "COLLABORATIVE RESEARCH: RAPID: Extreme disturbances/perturbations to coastal deposition systems." National Science Foundation: Chemical Oceanography. Dec. 2021 Apr. 2023. \$70,747. PI: Krause, J.W. Part of Collaborative Research Project with Rahman, S. (University of Colorado Boulder)
- "Ridges Safe <u>havens</u> for ice-associated flora and fauna in a seasonally ice-covered Arctic <u>Ocean</u>" (<u>HAVOC</u>). Research Council of Norway. Jan. 2019 Dec 2022. 160,000 NOK (~\$20,000). Subaward Lead: Krause, J.W.
- "Peering into nature's glass boxes using nano-Raman spectroscopy to answer novel questions in diatom-focused environmental research." National Science Foundation: EPSCoR Research Infrastructure Improvement. Oct 2018 Sept 2022. \$121,325. PI: Krause, J.W.
- "The biotic and abiotic controls on the Silicon cycle in the northern Gulf of Mexico (supplement)." National Science Foundation: Chemical Oceanography. Apr. 2016 Mar. 2020. \$19,446. PI: Krause, J W
- "The biotic and abiotic controls on the Silicon cycle in the northern Gulf of Mexico." National Science Foundation: Chemical Oceanography. Apr. 2016 Mar. 2020. \$478,066. PI: Krause, J.W.
- "COLLABORATIVE RESEARCH: What controls the transfer of diatom organic matter to age-0 pollack prey in the Bering Sea ecosystem?" National Science Foundation: Arctic Natural Sciences. Nov. 2016 Oct. 2019. \$91,357. PI: Krause, J.W. Part of Collaborative Research Project with co-PI Lomas, M.W. (Bigelow Laboratory for Ocean Sciences).
- "Microzooplankton biomass and grazing rates on the Arctic Program Cruises." North Pacific Research Board. Oct. 2016 Sept. 2019. \$29,431. PI: Krause, J.W. Part of Collaborative Research Project with Lead PI Lomas, M.W. (Bigelow Laboratory for Ocean Sciences).
- "Alabama Center for Ecological Resilience (ACER): Impacts of the DwH accident on phytoplankton-microzooplankton resiliency." Gulf of Mexico Research Initiative Consortium. Jan. 2015 Dec. 2018. \$707,466 (includes subaward to Rutgers University). PIs: Krause, J.W. (DISL) and Thamatrakoln, K. (Rutgers).
- "CONsortium for oil spill exposure pathways in COastal River-Dominated Ecosystems (CONCORDE): Spatial variability in primary producer abundance in production on the Mississippi-Alabama shelf." Gulf of Mexico Research Initiative Consortium. Jun. 2015 Dec. 2017. \$47,100. Investigator: Krause, J.W.
- "Group-Specific Diatom Silica Production in a Coastal Upwelling System." National Science Foundation: Biological Oceanography. Apr. 2012 Mar. 2017. \$453,487. PI: Krause, J.W.
- "Acquisition of a Laser Ablation Inductively Coupled Plasma Mass Spectrometer to Support Marine Science Research and Education in the Northern Gulf of Mexico." National Science Foundation: Biological Field Stations & Marine Labs. Jul. 2013 Jun. 2014. \$314,725. Pls: Patterson, W., Carmichael, R.H., Heck, K.L., Krause, J.W., Powers, S.
- "COLLABORATIVE RESEARCH: Understanding the role of picocyanobacteria in the marine silicate cycle." National Science Foundation: Biological Oceanography. Jan. 2012 Dec. 2015. \$256,128. PIs: Krause, J.W. (DISL) and Brzezinski, M.A. (UCSB). Part of Collaborative Research Project with Baines, S.B. & Collier, J.L. (Stony Brook University), Twining, B.S. (Bigelow Laboratory for Ocean Sciences)

<u>PEER-REVIEWED PUBLICATIONS</u>: †Denotes led by Graduate or Undergraduate student. Published:

- †Smith, A.M., del Valle, D.A., Rellinger, A.R., **Krause, J.W.**, Kiene, R.P. A protocol for the synthesis of [35S]-labeled 3-dimethylsulfoniopropionate from L-methionine for use in biogeochemical studies. 2024. *Marine Chemistry* 104440. https://doi.org/10.1016/j.marchem.2024.104440
- Ng, H.C., Hendry, K.R., Ward, R., Woodward, E.M., Leng, M.J., Pickering, R.A., Krause, J.W. 2024.

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- Detrital input sustains diatom production off a glaciated Arctic coast. *Geophysical Research Letters* 51: e2024GL108324. https://doi.org/10.1029/2024GL108324
- †Morrison, B.H., Jones, J.L., Dzwonkowski, B., **Krause, J.W.** 2024. Tracking *Vibrio*: Population Dynamics and Ecology of *Vibrio parahaemolyticus* and *V. vulnificus* in an Alabama Estuary. *Microbiology Spectrum*. https://doi.org/10.1128/spectrum.03674-23
- Baker, R., Curry, T., Deleon, S., Bates, C., **Krause, J.W.** 2024. Simple bulk pigment analysis suggests microphytobenthos contributions to food webs may be underestimated due to isotopic contamination by remineralized wetland carbon. *Food Webs* 38: e00342. https://doi.org/10.1016/j.fooweb.2024.e00342
- †Venable, J.L., Sura, S.A., **Krause, J.W.** 2023. Epiphytic diatom production on the seagrass *Thalassia testudinum* in northern Gulf of Mexico. *Gulf and Caribbean Research* 34(1): SC19-SC23. https://doi.org/10.18785/gcr.3401.19
- Maniscalco M.A., Brzezinski, M.A., **Krause, J.W.**, Thamatrakoln, K. 2023. Decoupling silicon metabolism from carbon and nitrogen assimilation poises diatoms to exploit episodic nutrient pulses in a coastal upwelling system. *Frontiers in Marine Science* 10: 1291294. https://doi.org/10.3389/fmars.2023.1291294
- Forsch, K.O., Fulton, K.C., Weiss, M.M., **Krause, J.W.**, Chabert, P., Stukel, M.R., Barbeau, K.A. 2023. Iron limitation and biogeochemical effects in southern California Current coastal upwelling filaments. *Journal of Geophysical Research: Oceans* 128: e2023JC019961. https://doi.org/10.1029/2023JC019961
- †Pickering, R.A., Wang, X.L., Hendry, K.R., Maiti, K., **Krause, J.W.** 2023. An Investigation into the Characteristics of Reactive Silicon Pools of Coastal Marine Sediments. *Continental Shelf Research* 268: 105126. https://doi.org/10.1016/j.csr.2023.105126
- **Krause, J.W.**, Boyette, A.D., Marquez, I.A., Pickering, R.A., Maiti, K. 2023. Drivers of diatom production and the legacy of eutrophication in two river plume regions of the northern Gulf of Mexico. *Frontiers in Marine Science* 10. https://doi.org/10.3389/fmars.2023.1162685
- Ward, J.P.J., Hendry, K.R., Arndt, S., Faust, J.C., Freitas, F.S., Henley, S.F., **Krause, J.W.**, März, C, Tessin, A.C., Airs, R. 2022. Benthic Silicon Cycling in the Arctic Barents Sea: a Reaction-Transport Model Study. *Biogeosciences* 19(14), 3445-3467. https://doi.org/10.5194/bg-19-3445-2022
- Ward, J.P.J., Hendry, K.R., Arndt, S., Faust, J.C., Freitas, F.S., Henley, S.F., **Krause, J.W.**, März, C, Ng, H.C., Pickering, R.A., Tessin, A.C. 2022. Stable Silicon Isotopes Uncover a Mineralogical Control on the Benthic Silicon Cycle in the Arctic Barents Sea. *Geochimica et Cosmochimica Acta* 329: 206-230. https://doi.org/10.1016/j.gca.2022.05.005
- †Kemp, E.J., Roseburrough, R.R., Elliot, E.A., **Krause, J.W.** 2021. Spatial variability of sediment amorphous silica and its reactivity in a Northern Gulf of Mexico Estuary and Coastal Zone. *Gulf and Caribbean Research* 32(1): SC6-SC11. https://doi.org/10.18785/gcr.3201.14
- **Krause, J.W.**, Lomas, M.W., Danielson, S.L. 2021. Direct to consumers: reduced nutrient limitation and microzooplankton losses enable efficient passage of diatom production to higher trophic levels or export during spring in the Northern Bering and Chukchi Seas. *Deep-Sea Research II* 191-192: 104950. https://doi.org/10.1016/j.dsr2.2021.104950
- Closset, I., McNair, H.M., Brzezinski, **Krause, J.W.**, Thamatrakoln, K., Jones, J. 2021. Diatom response to alterations in upwelling and nutrient dynamics associated with climate forcing in the California Current System. *Limnology and Oceanography* 66(4): 1578-1593. https://doi.org/10.1002/lno.11705
- †Curry, T., **Krause, J.W.**, Baker, R. 2020. Small-Scale Variability in Carbon Isotope Ratios of Microphytobenthos and Dissolved Inorganic Carbon in a Northern Gulf of Mexico Salt Marsh. *Gulf and Caribbean Research* 31 (1): SC41-SC45. https://doi.org/10.18785/gcr.3101.16
- Cox, T.E., Cebrian, J., Tabor, M., West, L., **Krause, J.W.** 2020. Do diatoms dominate benthic production in shallow systems? A case study from a mixed seagrass bed. *Limnology and Oceanography: Letters* 5(6): 425-434. https://doi.org/10.1002/lol2.10167

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- †Marquez, I.A., Abraham, A., **Krause, J.W.** 2020. Organic polymer consumption facilitates domoic acid entry into the marine food web without direct ingestion of *Pseudo-nitzschia*. *Harmful Algae* 98: 101891. https://doi.org/10.1016/j.hal.2020.101891
- †Pickering, R.A., Cassarino, L., Hendry, K.R., Wang, X.L., Maiti, K., **Krause, J.W.** 2020. Using Stable Isotopes to Disentangle Marine Sedimentary Signals in Reactive Silicon Pools. *Geophysical Research Letters* 47(15): e2020GL087877. https://doi.org/10.1029/2020GL087877
- Saad, E.M., Pickering, R.A., Shoji, K., Hossain, M.I., Glover, T.G., *Krause, J.W., Tang, Y. 2020. Effect of Cleaning Methods on the Reactivity of Diatom Frustules. *Marine Chemistry* 224: 103286 https://doi.org/10.1016/j.marchem.2020.103826 *Corresponding author.
- **Krause, J.W.**, Brzezinski, M.A., Largier, J.L., McNair, H.M., Maniscalco, M., Bidle, K.D., Allen, A.E., Thamatrakoln, K. 2020. The interaction of physical and biological factors as drivers of phytoplankton spatial distribution in the northern California Current. *Limnology and Oceanography* 65(9): 1974-1989. https://doi.org/10.1002/lno.11431
- **Krause, J.W.**, Lomas, M.W. 2020. Understanding diatoms' past and future biogeochemical role in high-latitude seas. *Geophysical Research Letters* 47(1): e2019GL085602. https://doi.org/10.1029/2019GL085602
- Agustí, S., **Krause, J.W.**, Marquez, I.A., Wassmann, P., Kristiansen, S., Duarte, C.M. 2020. Arctic (Svalbard Islands) Active and Exported Diatom Stocks and Cell Health Status. *Biogeosciences* 17: 35-45. https://doi.org/10.5194/bg-17-35-2020
- †Chaplin, C.C., Tabor, M., Marquez, I.A., Maiti, K., **Krause, J.W.** 2019. Resuscitation of Microalgae from Mississippi River Plume Sediments. *Gulf and Caribbean Research* 30: SC28-SC41. https://doi.org/10.18785/gcr.3001.15
- †Deleon, S.N., **Krause**, **J.W.**, Baker, R. 2019. Variability in microphytobenthos biomass and carbon isotopic values in shallow coastal waters of the northern Gulf of Mexico. *Gulf and Caribbean Research* 30: SC22-SC27. https://doi.org/10.18785/gcr.3001.11
- Redalje, D., Ammerman, J., Cable, J., Herrera, J., Knapp, A., Krause, J.W., Valdes, D., Hayward, A. 2019.
 Nutrients in the Gulf of Mexico: Distributions, Cycles, Sources, Sinks and Processes. In <u>Gulf of Mexico Origin</u>, Waters, and Biota. Volume 5, Chemical Oceanography. Ed: T. S. Bianchi. Texas A&M University Press, College Station. (ISBN-13: 978-1623497743)
- Kranzler, C., **Krause, J.W.**, Brzezinski, M.A., Biggs, W., Maniscalco, M., Allen, A.E., Edwards, B.R., Van Mooy, B., Bidle, K.D., Thamatrakoln, K. 2019. Silicon limitation facilitates virus infection and mortality of marine diatoms. *Nature Microbiology* 4: 1790–1797. https://doi.org/10.1038/s41564-019-0502-x
- Hendry, K. R., Huvenne, V. A. I., Robinson, L. F., Annett, A., Badger, M., Jacobel, A. W., Ng, H.C., Opher, J., Pickering, R. A., Taylor, M. L., Bates, S. L., Cooper, A., Cushman, G. G., Goodwin, C., Hoy, S., Rowland, G., Samperiz, A., Williams, J. A., Achterberg, E. P., Arrowsmith, C., Brearley, J. A., Henley, S. F., Krause, J.W., Leng, M. J., Li, T., McManus, J. F., Meredith, M. P., Perkins, R., Woodward, E. M. 2019. Isotope Cycling in the Labrador Sea: Tracing the biogeochemical pathway of glacial meltwater from Southwest Greenland. *Progress in Oceanography* 176: 102126. https://doi.org/10.1016/j.pocean.2019.102126
- Gancel, H.N., Carmichael, R.H., Park, K., **Krause, J.W.**, Rikard, S. 2019. Field Mark-Recapture of Calcein-Stained Larval Oysters (Crassostrea virginica) in a Freshwater-Dominated Estuary. *Estuaries and Coasts* 42: 1558–1569. https://doi.org/10.1007/s12237-019-00582-6
- Lomas, M.W., Baer, S.E., Acton, S., **Krause, J.W.** 2019. Pumped up by the Cold: Elemental Quotas and Stoichiometry of Polar Diatoms. *Frontiers in Marine Science*. https://doi.org/10.3389/fmars.2019.00286
- **Krause, J.W.**, Schulz, I.K, Rowe, K.A., Dobbins, W., Winding, M., Sejr, M., Duarte, C.M., Agustí, S. 2019. Silicic acid limitation drives bloom termination and potential carbon sequestration in an Arctic bloom. *Scientific Reports* 9: 8149. https://doi.org/10.1038/s41598-019-44587-4
- Stukel, M.R., Kelly, T.B., Aluwihare, L.I., Barbeau, K.A., Goericke, R., **Krause, J.W.**, Landry, M.R., Ohman, M.D. 2019. The Carbon:²³⁴Thorium ratios of sinking particles in the California Current

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- Ecosystem 1: Relationships with plankton ecosystem dynamics. *Marine Chemistry* 212: 1-15. https://doi.org/10.1016/j.marchem.2019.01.003
- **Krause, J.W.**, Duarte, C.M., Marquez, I.A., Assmy, P., Fernández-Méndez, M., Wiedmann, I., Wassmann, P., Kristiansen, S., Agustí, S. 2018. Biogenic silica production and diatom dynamics in the Svalbard region during spring. *Biogeosciences* 15: 6503-6517. https://doi.org/10.5194/bg-15-6503-2018
- †McNair, H.M., Brzezinski, M.A., **Krause, J.W.** 2018. Diatom populations in an upwelling environment decrease silica content to avoid growth limitation. *Environmental Microbiology* 20(11): 4184-4193. https://doi.org/10.1111/1462-2920.14431
- Ohnemus, D. C., **Krause**, **J.W.**, Brzezinski, M.A., Collier, J. L., Baines, S. B., Twining, B. S. 2018. The chemical form of silicon in marine *Synechococcus*. *Marine Chemistry* 206: 44-51. https://doi.org/10.1016/j.marchem.2018.08.004
- Stukel, M.R., Biard, T., **Krause, J.W.**, Ohman, M.D. 2018. Large Phaeodaria in the Twilight Zone: Their Role in the Carbon Cycle. *Limnology and Oceanography* 63(6): 2579-2594. https://doi.org/10.1002/lno.10961
- Biard, T., **Krause**, **J.W.**, Stukel, M.R., Ohman, M.D. 2018. The significance of giant phaeodarians (Rhizaria) to biogenic silica export in the California Current Ecosystem. *Global Biogeochemical Cycles* 32(6): 987-1004. https://doi.org/10.1029/2018GB005877
- Greer, A.T., Shiller, A.M., Hofmann, E.E., Wiggert, J.D., Warner, S.J., Parra, S.M., Pan, C., Book, J.W., Joung, D., Dykstra, S., **Krause, J.W.**, Dzwonkowski, B., Soto, I.M., Cambazoglu, M.K., Deary, A.L., Briseño-Avena, C., Boyette, A.D., Kastler, J.A., Sanial, V., Hode, L., Nwankwo, U., Chiaverano, L.M., O'Brien, S.J., Fitzpatrick, P.J., Lau, Y.H., Dinniman, M.S., Martin, K.M., Ho, P., Mojzis, A.K., Howden, S.D., Hernandez, F.J., Church, I., Miles, T.N., Sponaugle, S., Moum, J.N., Arnone, R.A., Cowen, R.K., Jacobs, G.A., Schofield, O., Graham, W.M. 2018. Functioning of coastal river-dominated ecosystems and implications for oil spill response: From observations to mechanisms and models. *Oceanography* 31(3): 90-103. https://doi.org/10.5670/oceanog.2018.302
- †McNair, H.M., Brzezinski, M.A., Till, C.P., **Krause, J.W.** 2018. Taxa-specific contributions to silica production in natural diatom assemblages. *Limnology and Oceanography* 63(3): 1056-1075. https://doi.org/10.1002/lno.10754
- **Krause, J.W.**, Darrow, E.S., Pickering, R.A., Carmichael, R.H., Larson, A. M., Basaldua, J. 2017. Reactive Silica Fractions in Coastal Lagoon Sediments from the Northern Gulf of Mexico. *Continental Shelf Research* 151: 8-14. https://doi.org/10.1016/j.csr.2017.09.014
- Dzwonkowski, B., Greer, A.T., Briseño-Aveno, C., **Krause, J.W.**, Joung, D., Deary, A., Soto Ramos, I., Hernandez, F., Wiggert, J., Fizpatrick, P., O'Brien, S.J., Dykstra, S.L., Lau, Y., Cambazoglu, M.K., Howden, S.D., Shiller, A.M., Graham, W.M. 2017. Influence of estuarine-exchange on the coupled bio-physical water column structure during the fall season on the Alabama shelf. *Continental Shelf Research* 140: 96-109. https://doi.org/10.1016/j.csr.2017.05.001
- Brzezinski, M.A., **Krause, J.W.**, Baines, S. B., Collier, J. L., Ohnemus, D. C., Twining, B. S. 2017. Patterns and Regulation of Silicon Accumulation in *Synechococcus* spp. *Journal of Phycology* 53(4): 746-761. https://doi.org/10.1111/jpy.12545
- **Krause, J.W.**, Brzezinski, M.A., Baines, S. B., Collier, J. L., Twining, B. S., Ohnemus, D. C. 2017. Picoplankton contribution to biogenic silica stocks and production rates in the Sargasso Sea. *Global Biogeochemical Cycles* 31(5): 762-774. https://doi.org/10.1002/2017GB005619
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- Décima, M., Landry, M. R., Stukel, M. R., Lopez-Lopez, L., **Krause, J. W.** 2016. Mesozooplankton biomass and grazing in the Costa Rica Dome: amplifying variability through the plankton food web. *Journal of Plankton Research* 38(2): 317-300. https://doi.org/10.1093/plankt/fbv091
- **Krause, J.W.**, Stukel, M.R., Taylor A.G., Taniguchi, D.A. A., De Verneil, A., Landry, M.R. 2016. Net biogenic silica production and the contribution of diatoms to new production and organic matter export in the Costa Rica Dome ecosystem. *Journal of Plankton Research*, 38(2): 216-229.

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- †McNair, H.M., Brzezinski, M.A., **Krause, J.W.** 2015. Quantifying diatom silicification with the fluorescent dye, PDMPO. *Limnology and Oceanography: Methods* 13(10): 587-599. https://doi.org/10.1002/lom3.10049
- Brzezinski, M.A., **Krause, J.W.**, Bundy, R.M., Barbeau, K.A., Franks, P.J.S., Goericke, R., Landry, M.R., Stukel, M. R. 2015. Variable influence of iron stress on siliceous biomass and silica production and silicon and carbon export in a frontal zone within the California Current. *Journal of Geophysical Research: Oceans* 120(7): 4654–4669. https://doi.org/10.1002/2015JC010829
- **Krause, J.W.**, Brzezinski, M.A., Goericke, R., Landry, M.R., Ohman, M. D., Stukel, M. R., Taylor, A.G. 2015. Variability in diatom contributions to biomass, organic matter production and export across a frontal gradient in the California Current Ecosystem. *Journal of Geophysical Research: Oceans* 120(2): 1032–1047. https://doi.org/10.1002/2014JC010472
- Baumann, M.S., Moran, S.B., Lomas, M.W., Kelly, R.P., Bell, D.W., **Krause, J.W.** 2014. Diatom control of the autotrophic community and particle export in the eastern Bering Sea during the recent cold years (2008-2010). *Journal of Marine Research* 72: 405–444, https://elischolar.library.yale.edu/journal of marine research/399
- Wilson, C., Villareal, T.A., Brzezinski, M.A., **Krause, J.W.**, Shcherbina, A.Y. 2013. Chlorophyll bloom development and the subtropical front in the North Pacific. *Journal of Geophysical Research: Oceans* 118(3): 1473-1488. https://doi.org/10.1002/jgrc.20143
- **Krause, J.W.**, Brzezinski, M.A., Siegel, D.A., Thunell, R.C. 2013. Biogenic silica standing stock and export in the Santa Barbara Channel ecosystem. *Journal of Geophysical Research: Oceans* 118(2): 736-749. https://doi.org/10.1029/2012JC008070
- **Krause, J.W.**, Brzezinski, M.A., Villareal, T.A., Wilson, C. 2013. Biogenic silica cycling during summer phytoplankton blooms in the North Pacific subtropical gyre. *Deep-Sea Research I* 71: 49-60. https://doi.org/10.1016/j.dsr.2012.09.002
- Baines, S.B., Twining, B.S., Brzezinski, M.A., **Krause**, **J.W.**, Vogt, S., Assael, D., McDaniel, H. 2012. Significant silicon accumulation by marine picocyanobacteria. *Nature Geoscience* 5: 886-891. https://doi.org/10.1038/ngeo1641
- **Krause, J.W.**, Brzezinski, M.A., Villareal, T.A., Wilson, C. 2012. Increased kinetic efficiency for silicic acid uptake as a driver of summer diatom blooms in the North Pacific subtropical gyre. *Limnology and Oceanography* 57(4): 1084–1098. https://doi.org/10.4319/lo.2012.57.4.1084
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PUBLISHED DATASETS:

*National Science Foundation Ocean Sciences data is required to be achieved at Biological and Chemical Oceanography Data Management Office (BCO-DMO)

BCO-DMO Project Dataset collections (personal profile: www.bco-dmo.org/person/544582):

- The biotic and abiotic controls on the Silicon cycle in the northern Gulf of Mexico (10 datasets)
- <u>Collaborative Research: Resolving the processes controlling the distribution of the biogenic trace</u> gas dimethylsulfide and related compounds in the Subarctic NE Pacific (1 dataset)
- Group-Specific Diatom Silica Production in a Coastal Upwelling System (5 datasets)
- Understanding the Role of Picocyanobacteria in the Marine Silicate Cycle (9 datasets)
- Costa Rica Dome FLUx and Zinc Experiments (2 datasets)

Lemke, L., **Krause**, **J.W.**, Granskog, M.A., Assmy, P., Hoppe, C.J.M., Smith, A. 2024. Seasonal, spatial, and temporal variation of Biogenic silica (bSi) and Lithogenic silica (LSi) during MOSAiC and HAVOC expedition 2019/2020. PANGAEA, https://doi.org/10.1594/PANGAEA.971253

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- Krause, J.W. 2023. Chief Scientist, Cruise Catalog: PE22-20. Vessel: Pelican. Operator: Louisiana Universities Marine Consortium. Dates 2022-03-17 to 2022-03-19. Project: COLLABORATIVE RESEARCH: RAPID: Extreme disturbances/perturbations to coastal deposition systems. Cruise DOI: 10.7284/909573. https://www.rvdata.us/search/cruise/PE22-20
- Sutton, J., Dzwonkowski, B., **Krause, J.**, Hernandez, F., Graham, W. 2023. Nutrient flux and physical stability drive phytoplankton biomass variability along the Alabama shelf [Data set]. Dauphin Island Sea Lab. https://doi.org/10.57778/MCG4-F330
- Krause, J.W. 2022. Chief Scientist, Cruise Catalog: PE22-15. Vessel: Pelican. Operator: Louisiana Universities Marine Consortium. Dates 2021-12-14 to 2021-12-14. Project: COLLABORATIVE RESEARCH: RAPID: Extreme disturbances/perturbations to coastal deposition systems. Cruise DOI: 10.7284/909655. https://www.rvdata.us/search/cruise/PE22-15
- Krause, J.W. 2022. Chief Scientist, Cruise Catalog: PE22-05. Vessel: Pelican. Operator: Louisiana Universities Marine Consortium. Dates 2021-08-17 to 2021-08-17. Project: COLLABORATIVE RESEARCH: Understanding substrate limitation and Lithium and Silicon isotope fractionation during secondary clay formation in marine systems. Cruise DOI: 10.7284/909252. https://www.rvdata.us/search/cruise/PE22-05
- Boyette, A., Acton, S., **Krause, J.**, Graham, M. 2021. FlowCAM imaging of microplankton community collected aboard the R/V Point Sur, PS16_20, in the Mississippi Bight, northern Gulf of Mexico, from 2016-03-30 to 2016-04-09. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/V3S4VP4E
- Boyette, A., Cruz, V., Acton, S., **Krause, J.** 2021. FlowCAM imaging of microplankton community collected aboard R/V Point Sur, PS16_13, in the Mississippi Bight, northern Gulf of Mexico, from 2015-10-29 to 2015-11-05. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/KB13NMBX
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- **Krause, J.W.**, Lomas, M.W., 2019. Rates of diatom biogenic silica production, growth, and size-fractionated phytoplankton growth and microzooplankton grazing in the Bering and Chukchi Seas, spring 2017. Arctic Data Center. doi:10.18739/A2SF2MC1D
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- Mortazavi, B., **Krause**, **J.**, 2019. Water quality data collected during 3 CTD surveys from a small boat in Mobile Bay from 2016-07-11 to 2016-07-19 (NCEI Accession 0190491). NOAA National Centers for Environmental Information. Dataset. https://accession.nodc.noaa.gov/0190491
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- Briseno-Avena, C., Hernandez, F. J., Cowen, R.K., **Krause, J.W.** 2018. Mesozooplankton Size-Fractionated Gut Fluorescence, cruise PTS02, Spring 2016. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/N7XS5SSF.
- Briseno-Avena, C., Hernandez, F. J., Cowen, R.K., **Krause, J.W.** 2018. Mesozooplankton Size-Fractionated Gut Fluorescence, cruise PTS03, Summer 2016. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/N7T1522T.
- Briseno-Avena, C., Deary, A.L., Cowen, R.K., Hernandez, F. J., **Krause, J.W.** 2018. Mesozooplankton Size-Fractionated Dry Weight, cruise PTS03, July 2016. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/N7QJ7FN0.
- Briseno-Avena, C., Deary, A.L., Cowen, R.K., Hernandez, F. J., **Krause, J.W.** 2018. Mesozooplankton Size-Fractionated Dry Weight, cruise PTS02, Spring 2016. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/N75H7DB7.
- Briseno-Avena, C., Deary, A.L., Cowen, R.K., Hernandez, F. J., **Krause, J.W.** 2018. Mesozooplankton Size-Fractionated Dry Weight, cruise BCS01, Winter 2016. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/N71R6NK2.
- Briseno-Avena, C., Deary, A.L., Cowen, R.K., Hernandez, F. J., **Krause, J.W.** 2018. Mesozooplankton Size-Fractionated Dry Weight, cruise PTS01, Fall 2015. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/N798853D.
- Krause, J.W.; Acton, S. 2018. Biogenic silica standing stock and productivity on the Mississippi-Alabama Shelf, March to July, 2016. Alabama Center for Ecological Resilience (ACER). doi:10.7266/N70K2738
- Krause, J.W. 2018. Chief Scientist, Cruise Catalog: PE17-20. Vessel: Pelican. Operator: Louisiana Universities Marine Consortium. Dates 2017-05-03 to 2017-05-13. Project: Biotic and Abiotic Controls on the Silicon Cycle in the Northern Gulf of Mexico. Cruise DOI: 10.7284/907747. http://www.rvdata.us/catalog/PE17-20
- Krause, J.W. 2017. Chief Scientist, Cruise Catalog: PE17-04. Vessel: Pelican. Operator: Louisiana Universities Marine Consortium. Dates 2016-08-26 to 2016-09-06. Project: Biotic and Abiotic Controls on the Silicon Cycle in the Northern Gulf of Mexico. Cruise DOI: 10.7284/907261. http://www.rvdata.us/catalog/PE17-04
- Krause, J.W.; Acton, S. 2017. Biogenic silica standing stock and productivity on the Mississippi-Alabama Shelf in Fall 2015. Alabama Center for Ecological Resilience (ACER). DOI: 10.7266/N78050N9
- Krause, J.W.; Acton, S. 2017. Size-fractioned primary productivity on the Mississippi-Alabama Shelf in Fall 2015. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/N7668B83
- Krause, J.W.; Acton, S. 2017. Size-fractioned primary productivity on the Mississippi-Alabama Shelf in Fall 2015. Consortium for Oil Spill Exposure Pathways in Coastal River-Dominated Ecosystems (CONCORDE). DOI: 10.7266/N7668B83
- Krause, J.W. 2015. Chief Scientist, Cruise Catalog: PS1312. Vessel: Point Sur. Operator: Moss Landing Marine Laboratories. Dates 2013-06-27 to 2013-07-06. Project: Group-Specific Diatom Silica Production in a Coastal Upwelling System. Cruise DOI: 10.7284/903425. http://www.rvdata.us/catalog/PS1312

SCIENTIFIC SERVICE (PEER-REVIEWER):

Journal (Peer-reviewer):

Biogeosciences Continental Shelf Research Geochimica et Cosmochimica Acta Geophysical Research Letters Global Biogeochemical Cycles Gulf and Caribbean Research

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Deep-Sea Research I

Environmental Science and Technology Environmental Microbiology Reports

Estuaries and Coasts

Estuarine, Coastal and Shelf Science

FEMS Microbiology Ecology

Frontiers in Earth Science: Biogeoscience

Frontiers in Marine Science

Frontiers in Mar. Sci.: Global Change & the

Future Ocean

Frontiers in Microbiology

Frontiers of Environmental Science and

Engineering

Gulf and Caribbean Research Journal of Animal Ecology

Journal of Experimental Marine Biology and

Ecology

Journal of Geophysical Research: Oceans

Journal of Marine Systems Journal of Sea Research Limnology and Oceanography

Limnology and Oceanography: Letters

Marine Chemistry Marine Drugs

Marine Ecology Progress Series

Molecules

Nature Communications

Oceanological and Hydrobiological Studies Palaeogeography, Palaeoclimatology,

Palaeoecology

Philosophical Transactions B Progress in Oceanography

Science of the Total Environment

Associate Editor:

Limnology and Oceanography: Letters (2023 Clarivate impact factor 5.2)

Former Topic Editor - Frontiers in Marine Science Special Issue: Biogeochemistry and Genomics of

Silicification and Silicifiers, volume II

Former Associate Editor - Frontiers in Marine Science: Global Change and the Future Ocean

Funding agencies (Reviewer and *Panel service):

German-Israeli Foundation for Scientific Research and Development

German Research Association (Deutsche Forschungsgemeinschaft)

Gulf of Mexico Research Initiative

Israel Science Foundation

The National Institutes for Water Resources

National Science Centre of Poland (Nardowe Centrum Nauki)

New York Sea Grant

United States National Science Foundation (*Ocean Sciences, *Polar Programs)

External Standing Committees:

Gulf of Mexico Regional Class Research Vessel Consortium – DISL Point of Contact (2018 – current)

Internal Standing Committees & Service:

Wiese Distinguished Lecture Series, 2016 – present (School of Marine & Environmental Sciences, University of South Alabama) – Chair

DISL Annual Faculty Evaluation Committee, 2018 – present (Dauphin Island Sea Lab) – Member

Radiation Safety Committee, 2018 – present (University of South Alabama) – Rotating Member

DISL Research Vessel Development, 2020 - present (Dauphin Island Sea Lab) - Chair

Marine Sciences Graduate Student Organization, 2020 – present (University of South Alabama) – Advisor DISL Safety Committee, 2023 – present (Dauphin Island Sea Lab) – Chair

Sabbatical Committee, 2021-2022 (College of Arts & Sciences, University of South Alabama) – Member Promotion & Tenure Committee, 2022-2023 (College of Arts & Sciences, University of South Alabama) – Member

Support and Development Committee, 2023-2024 (College of Arts & Sciences, University of South Alabama) – Member

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Curriculum Committee, 2015 – 2022 (School of Marine & Environmental Sciences, University of South Alabama) – Member

PROFESSIONAL SOCIETIES (MEMBER):

Active: American Geophysical Union, Association for the Sciences of Limnology and Oceanography, Geochemical Society, The Oceanography Society

Former: Coastal & Estuarine Research Federation, European Geosciences Union, Gulf Estuarine Research Society

MENTORING:

Postdoctoral Scholars:

Howe, Kathryn (Ph.D.): Dauphin Island Sea Lab (current), Co-supervisor

Graduate Student Advising:

Barnette, Kayla (M.S.): University of South Alabama (current), Advisor Breland, Kendall (Ph.D.): University of South Alabama (current), Co-Advisor Gilman, Priya (Ph.D.): University of South Alabama (current), Co-Advisor Leard, Elizabeth (Ph.D.): University of South Alabama (current), Co-Advisor Siersma, Alison (M.S.): University of South Alabama (Dec 2024), Advisor Roseburrough, Ryan (Ph.D.): University of South Alabama (Dec 2024), Co-Advisor Smith, Alexandra (Ph.D.): University of South Alabama (Dec 2024), Co-Advisor Rellinger, Alison (Ph.D.): University of South Alabama (Dec 2024), Committee Chair Mallick, Debbrota (Ph.D.): University of South Alabama (Aug 2024), Committee Chair Marquez, Israel (Ph.D.): University of South Alabama (Dec. 2021), Advisor Morrison, Blair (M.S.): University of South Alabama (Aug. 2021), Co-Advisor Halstead, Kyle (M.S.): University of South Alabama (May 2021), Co-Advisor Pickering, Rebecca (Ph.D.): University of South Alabama (Jul. 2020), Advisor Williams, Tara (M.S.): University of South Alabama (Jul. 2019), Co-Advisor McNair, Heather (Ph.D.): University of California Santa Barbara (Dec. 2017), Co-Advisor Cole, Liesl (M.S.): University of South Alabama (withdrawn), Co-Advisor Marquez, Israel (M.S.): University of South Alabama (Jun. 2015), Advisor

Graduate Student Committees:

Hayes-Guastella, Lydia (Ph.D.): University of South Alabama (current), Committee Member Thielecke, Antonia (Ph.D.): Alfred Wegener Institute, Germany (current), Committee Member Dalessandri, Shannon (Ph.D.): University of Alabama (current), Committee Member Johnson, Jicayla (Ph.D.): University of Alabama (current), Committee Member Cannon, Randi (Ph.D.): University of South Alabama (current), Committee Member Wyatt, Shea (Ph.D.): University of Victoria, Canada (current), External Examiner Friberg, Lisa (Ph.D).: University of Bristol, United Kingdom (current), Committee Member Fung, Mai (Ph.D.): University of South Alabama (Dec. 2023), Committee Member Zhao, Simin (Ph.D.): Georgia Institute of Technology (Aug. 2023), Committee Member McQuagge, Audrey (M.S.): University of Alabama (Nov. 2022), Committee Member Hagemeyer, Alexis (M.S.): University of South Alabama (Jul. 2021), Committee Member Boyette, Adam (Ph.D.): University of Southern Mississippi (Dec. 2020), Committee Member Peter, Kimberly (M.S.): University of South Alabama (Jul. 2020), Committee Member Nicholson-Gancel, Haley (Ph.D.): University of South Alabama (May 2020), Committee Member Ebner, Byron (M.S.): Louisiana State University (May 2019), Committee Member Nash, Jessica (M.S.): University of South Alabama (Jun. 2018), Committee Member Bray, Chelsea (M.S.): University of South Alabama (Jul. 2016), Committee Member Motard-Côté, Jessie (Ph.D.): University of South Alabama (May 2016), Committee Member

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Anders, Jennifer (M.S.): University of Alabama (withdrawn), Committee Member Andrikos, Christopher (M.S.): Auburn University (withdrawn), Committee Member

Undergraduate Students and Interns:

Venable, Jonathan (Jacksonville University): May. 2023 – Aug. 2023 (NSF REU)

Braddock. Coleman (University of South Alabama): May. 2023 – Aug. 2023

LaSalle, Elizabeth (University of West Florida): May. 2022 – Aug. 2022 (NSF REU)

Burgess, Kodi (Auburn University): May. 2022 – Jun. 2022

Mazza, Sofia (University of Mobile): Nov. 2021 – Apr. 2022

Kemp, Elliot (Lyon College): Jun. 2021 – Aug. 2021 (NSF REU)

Curry, Trinity (Stillman College): Jun. 2020 – Aug. 2020 (NSF REU)

Cole, Dylan (Auburn University Montgomery): Oct. 2019 – Sep. 2020

Bates, Cassandra (University of South Alabama): Oct. 2019 – Jul. 2020

Deleon, Sharil (University of Rhode Island): May 2019 – Aug. 2019 (NSF REU)

Chaplin, Chase (Auburn University): Aug. 2018, July 2019 - Aug. 2019

Galford, Aislyn (University of Alabama): Jan. 2018 – Apr. 2018

Dobbins, William (Guilford University): Mar. 2016 – Dec. 2016, Apr. 2017 – Dec. 2017

Rhee, Jenny (Louisiana St. University): May 2017 – Aug. 2017 (NSF REU)

Tabor, Marnie (Athens St. University): May 2017 – Aug. 2017 (NSF REU)

Zepernick, Brittany (Bowling Green State University): Jun. 2016 – Aug. 2016 (NSF REU)

Williams, Collin Taylor (University of Alabama): Aug. 2015 – Dec. 2015

Lauritzen, Charisma (University of Portland): Jun. 2015 – Aug. 2015 (NSF REU)

Cochran, Synethia (Bishop State University, University of Phoenix): Jan. 2015 – Mar. 2015

Basaldua, Jose (University of California Santa Barbara): Jun. 2014 - Sept. 2014

Larson, Ashley (Colorado State University): Jan. 2014 – Apr. 2014

Medrano, Mynor (University of California Santa Barbara): Jun. 2012 – Jun. 2013

Marquez, Israel (University of California Santa Barbara): Apr. 2012 – Jun. 2013

Deaton, Kelsey (University of California Santa Barbara): Sept. 2010- Jun. 2011

High School Students:

Gradney, Kenzie (Denham Springs, LA): Jun. 2024 – Jul. 2024

Hallman, Sofia (Albany, GA): Jul. 2022 – Aug. 2022

Steward, Faith (Semmes, AL): Jun. 2022 – Aug. 2022

Bird, William (Hollis, NH): Jun. 2021 – Apr. 2022

Cowart, Katie (Christiana, TN): Jul. 2020 – Apr. 2021

Medina, Elizabeth (Palatine, IL): Jun. 2018 - Aug. 2018

Kelso, Sarah (Huntsville, AL): Jun. 2017 – Aug. 2017

Chaplin, Ansley (Mobile, AL): Jun. 2016 – Aug. 2016

CRUISE EXPERIENCE: 34 cruises \rightarrow 339 days at sea (as of Jan 2025),

Vessel (RV), Region: Dates. Chief Scientist, CS (Home Institution)

R/V Pelican, Louisiana Shelf: 7 – 8 Jan 2025. CS: Self

R/V Pelican, Louisiana Shelf: 14 – 21 Sep 2024. CS: Self

R/V Sally Ride, Oregon Shelf: 18 – 25 May 2023. CS: Ben Van Mooy (WHOI)

R/V Pelican, Louisiana Shelf: 26 – 27 Aug 2022. CS: Shaily Rahman (CU Boulder)

R/V Pelican, Louisiana Shelf: 1 – 2 Jun 2022. CS: Shaily Rahman (CU Boulder)

R/V Pelican, Louisiana Shelf: 17 – 19 Mar 2022. CS: Shaily Rahman (CU Boulder)

R/V Pelican, Louisiana Shelf: 15 Dec 2021. CS: Self

R/V Pelican, Louisiana Shelf: 17 Aug 2021. CS: Self

R/V Sikuliaq, Bering Sea & Chukchi Sea: 4 – 28 Jun 2017. CS: Seth Danielson (UAF)

R/V Pelican, Louisiana Shelf: 4 – 13 May 2017. CS: Self

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R/V Pelican, Louisiana Shelf: 27 Aug – 6 Sep 2016. CS: Self
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- R/V Helmer Hanssen, Arctic/Svalbard: 17 May 29 May 2016. CS: Ingrid Wiedmann (UiT)
- R/V Point Sur, Gulf of Mexico: 29 Mar 11 Apr 2016. CS: Alison Deary & Adam Greer (USM)
- R/V Point Sur, Gulf of Mexico: 27 Oct 3 Nov 2015. CS: Frank Hernandez (USM)
- R/V Atlantic Explorer, North Atlantic: 15 19 Aug 2013. CS: Michael Lomas (Bigelow)
- R/V Point Sur, Central California Coast: 27 Jun 6 Jul 2013. CS: Self
- R/V Atlantic Explorer, Sargasso Sea: 18 Oct 22 Oct 2012. CS: Rodney Johnson (BIOS)
- R/V Atlantic Explorer, Sargasso Sea: 11 Jul 16 Jul 2012. CS: James Sadler (BIOS)
- R/V Melville, California Current: 18 Jun 17 Jul 2011. CS: Michael Landry (UCSD)
- R/V Point Sur, Santa Barbara Channel: 9 17 May 2011. CS: Craig Carlson (UCSB)
- R/V Point Sur, Santa Barbara Channel: 9 18 Apr 2010. CS: Craig Carlson (UCSB)
- R/V Ka'imikai-O-Kanaloa, North Pacific: 2 6 Nov 2009. CS: Paul Lethaby (UH)
- R/V Kilo Moana, North Pacific: 17 21 Aug 2009. CS: Paul Lethaby (UH)
- R/V Kilo Moana, North Pacific: 29 Jul 14 Aug 2009. CS: Mark Brzezinski (UCSB)
- R/V Kilo Moana, North Pacific: 19 23 Jan 2009. CS: Fernando Santiago-Mandujano (UH)
- R/V Kilo Moana, North Pacific: 1 22 Jul 2008. CS: Mark Brzezinski (UCSB)
- R/V Atlantic Explorer, Sargasso Sea: 23 27 Apr 2007. CS: John Dacey (WHOI)
- R/V Atlantic Explorer, Sargasso Sea: 16 20 Apr 2007. CS: Rodney Johnson (BIOS)
- R/V Atlantic Explorer, Sargasso Sea: 2 4 Apr 2007. CS: Jonathan Whitefield (BIOS)
- R/V Atlantic Explorer, Sargasso Sea: 8 12 May 2006. CS: Rodney Johnson & Debra Lomas (BBSR)
- R/V Atlantic Explorer, Sargasso Sea: 21 24 Apr 2006. CS: Maureen Conte (BBSR, WHMBL)
- R/V Roger Revelle, Equatorial Pacific: 3 Sep 1 Oct 2005. CS: David Nelson (OSU)
- *R/V Oceanus*, Sargasso Sea: 15 Feb 16 Mar 2005. CS: Michael Lomas (BBSR)
- R/V Oceanus, Sargasso Sea: 15 Feb 15 Mar 2004. CS: Michael Lomas (BBSR)
- Day cruise locations (<u>not counted in total days</u>): Alabama (Mobile Bay, Gulf of Mexico), Bermuda (Hydrostation S), California (Santa Barbara Channel), New York (Great Peconic Bay, Great South Bay, Peconic River, Mecox Bay, Moriches Bay, Shinnecock Bay), Oregon (Yaquina River), Mississippi (Mississippi Sound, Gulf of Mexico), Washington (Juan de Fuca Straight, Neah Bay, Puget Sound, San Juan Islands).

ABSTRACTS & NON PEER-REVIEW PUBLICATIONS (last 10 years only):

- Michalopoulos, P., **Krause, J.W.**, Pickering, R.A., Rouselaki, E., Maiti, K., Taillefert, M., Rabouille, C., Corvaisier, R. Microbial facilitation of rapid authigenic silica precipitation in marine sediments. Silicamics 4 Symposium: Biogeochemistry and genomics of silicification and silicifiers. Logonna-Daoulas, Brittany (France). 14-18 October 2024.
- Thamatrakoln, K., Maniscalco, M.A., Brzezinski, M.A., **Krause, J.W.** Decoupling Silicon Metabolism from Carbon and Nitrogen Assimilation Poises Diatoms to Exploit Episodic Nutrient Pulses in a Coastal Upwelling System. Silicamics 4 Symposium: Biogeochemistry and genomics of silicification and silicifiers. Logonna-Daoulas, Brittany (France). 14-18 October 2024.
- Assmy, P., Campbell, K., Goraguer, L., Kauko, H., Klaas, C., **Krause, J.W.**, Lalande, C., Lenss, M., Montiero, F., Moreau, S., Smetacek, V. Linking polar diatom ecology with carbon and silicon cycles. Silicamics 4 Symposium: Biogeochemistry and genomics of silicification and silicifiers. Logonna-Daoulas, Brittany (France). 14-18 October 2024.
- Moreau, S., Lenss, M., Goraguer, L., Kauko, H., Liniger, G., Assmy, P., Campbell, K., Wold, A., **Krause**, **J.W.**, Belt, S.T., Smik, L., Schmidt, K. Silicamics 4 Symposium: Biogeochemistry and genomics of silicification and silicifiers. Logonna-Daoulas, Brittany (France). 14-18 October 2024.
- **Krause, J.W.**, Pickering, R., Hong, W.L. "Cold storage" do sediment microbes facilitate silica sequestration in Arctic sediments? Silicamics 4 Symposium: Biogeochemistry and genomics of silicification and silicifiers. Logonna-Daoulas, Brittany (France). 14-18 October 2024.
- Thielecke, A., Bryan, N., Eggers, L., **Krause, J.W.**, Fernandez Mendez, M. Influence of light and silicic acid on the productivity of the Arctic phytoplankton community. Silicamics 4 Symposium:

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- Biogeochemistry and genomics of silicification and silicifiers. Logonna-Daoulas, Brittany (France). 14-18 October 2024.
- Mallick, D., Wang, X., Miletto, M., **Krause, J.W.** Chromium isotope fractionation in the redox-stratified Chesapeake Bay. Goldschmidt Conference. Chicago, IL, USA. 18-23 August 2024.
- Venable, J.L., Sura, S.A., **Krause**, **J.W.** 2024. Epiphytic diatom production on the seagrass (*Thalassia testudinum*) in northern Gulf of Mexico. National Conference on Undergraduate Research (NCUR). Long Beach, CA, USA. 8-10 April 2024.
- Venable, J.L., Sura, S.A., **Krause**, **J.W.** 2024. Epiphytic diatom production on the seagrass (*Thalassia testudinum*) in northern Gulf of Mexico. 85th Annual Meeting of the Association of Southeastern Biologists. Chattanooga, TN, USA. 20-23 March 2024.
- Barnes, C., Bednarczyk, S., Smith, W., Townsend, L., **Krause, J.W.** Phytoplankton Growth Limitation During the Winter to Spring Transition in the Lower Mobile Bay Estuary. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. 19-23 February 2024.
- Dalessandri, S. Siersma, A., Robertson, A., **Krause, J.W.**, Hoadley, K. High-temporal resolution photo-optical measurements reveal unique changes in photo-acclimation and productivity among different phytoplankton species found within the Gulf of Mexico. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. 19-23 February 2024.
- **Krause, J.W.**, Rahman, S., Roseburrough, R., Lemke, L., de Souza, G.F. "Reversing" reverse weathering? The effects of extreme weather and seasonality on early diagenesis of biogenic silica. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. 19-23 February 2024.
- Lemke, L., Roseburrough, R., Siersma, A., Rahman, S., **Krause, J.W.** 'Weathering' away? Potential tropical cyclone effects on marine sedimentary biogenic silica. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. 19-23 February 2024.
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- Siersma, A., Dalessandri, S., Robertson, A., Hoadley, K., **Krause, J.W.** Synergistic pCO₂ and Light Effects on Primary Productivity and Silica Metabolism for a Gulf of Mexico Coastal Alabama Diatom. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. 19-23 February 2024.
- Smalls, T., **Krause**, **J.W.**, Rahman, S. Hurricane Activity Changes Patterns in the Silica Cycle in the Mississippi Delta Region. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. 19-23 February 2024.
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- Thamatrakoln, K., Maniscalco, M.A., Brzezinski, M.A., **Krause, J.W.** Decoupling Silicon Metabolism from Carbon and Nitrogen Assimilation Poises Diatoms to Exploit Episodic Nutrient Pulses in a Coastal Upwelling System. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. 19-23 February 2024.
- Van Mooy, B.A.S., Bent, S.M., Bidle, K.D., Fredricks, H.F., Holm, H.C., Girard, Z., **Krause, J.W.**, Prakash, M., Subhas, A.V., Thamatrakoln, K. Floating fats from phytoplankton affect the fate of carbon.

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- Morrison, B., Jones, J., Dzwonkowski, B., **Krause, J.W.** Tracking Vibrio: Populations Dynamics and Ecology of V. parahaemolyticus and V. vulnificus in ab Alabama Estuary. Coastal and Estuarine Research Federation 27th Biennial Conference. Portland, OR, USA. 12–16 November 2023.
- Rahman, S., **Krause**, **J.W.** Do tropical cyclones alter the sedimentary silica cycle in deltaic sediment? Coastal and Estuarine Research Federation 27th Biennial Conference. Portland, OR, USA. 12–16 November 2023.
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- Mallick, D., **Krause**, **J.W.** Influence of marine phytoplankton in surface water Cr cycling. Bays & Bayous Symposium. Mobile, AL, USA. 24-25 January 2023.
- Dalessandri, S. Lowry, S., Robertson, A., **Krause, J.W.**, Hoadley, K. High resolution photo-optical study reveals unique changes in photo-acclimation and productivity within two closely related green algal species (*Micromonas sp.*) under nitrogen replete and limited conditions. Bays & Bayous Symposium. Mobile, AL, USA. January 2023.
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- **Krause, J.W.**, Rahman, S. Do tropical cyclones short-circuit sedimentary elemental sequestration in the northern Gulf of Mexico? Bays & Bayous Symposium. Mobile, AL, USA. January 2023.
- **Krause, J.W.**, Rahman, S. Do tropical cyclones alter rates of reverse weathering in deltaic sediments? I. Ocean Carbon and Biogeochemistry (OCB) C-SAW Meeting. Raleigh, NC. 23-26 Oct 2022.
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- **Krause, J.W.** Silicon Cycling In River Plume Systems: Insights From The Northern Gulf Of Mexico. Ocean Sciences Meeting. Virtual (due to COVID-19 Pandemic). 24 Feb-4 Mar 2022.
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- Ward, J., Hendry, K.R., Arndt, S., Pickering, R.A., März, C., Faust, J.C., Henley, S., **Krause, J.W.**, Ng, H.C. Early diagenesis of silica in Barents Sea sediments: a holistic laboratory and reaction-transport model assessment. Goldschmidt Abstracts. Virtual Meeting (due to COVID-19 Pandemic). 4-9 July 2021.
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- Morrison, B., Jones, J., Horn, J., Gerken, C., Sheehan, D., **Krause, J.W.** Identifying Ecophysiological Regimes of Phytoplankton Communities in the Mississippi Sound System. 7th Annual Southeastern Biogeochemistry Symposium. Atlanta, GA, USA. 14–15 March 2020.
- Cole, D., Volkenborn, N., **Krause, J.W.** Effects of benthic macrofaunal bioturbation on the preservation of diatom silica and formation of authigenic products. 7th Annual Southeastern Biogeochemistry Symposium. Atlanta, GA, USA. 14–15 March 2020.
- Pickering, R.A., Cassarino, L., Hendry, K.R., Wang, X.L., Maiti, K., **Krause, J.W.** Resolving Stable Silicon Isotope Signatures in Reactive Silicon Pools of Coastal Marine Sediments. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. San Diego, CA, USA. February 2020.
- Marquez, I.A., Abraham, A., **Krause, J.W.** Marine snow consumption facilitates a novel entry pathway for domoic acid into the marine food web. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. San Diego, CA, USA. February 2020.
- Maniscalco, M., Brzezinski, M.A., McNair, H., **Krause, J.W.**, Thamatrakoln, K. Diatom community transcriptomic response to nitrate and silicon limitation. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. San Diego, CA, USA. February 2020.
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- Kranzler, C., **Krause, J.W.**, Brzezinski, M.A., Edwards, B.R., Biggs, W., Maniscalco, M., McCrow, J., Van Mooy, B., Bidle, K.D., Allen, A.E., Thamatrakoln, K. Biogeochemical consequences of diatom-virus interactions in the California Current Ecosystem. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. San Diego, CA, USA. February 2020.
- Hendry, K.R., Ng, H.C., Ward, J.P., de Freitas, F.S., Pickering, R., **Krause, J.W.**, Henley, S., Arndt, S., März, C. Benthic cycling of silicon in the Atlantic Arctic & Subarctic shelf sediments: insights from silicon isotopes. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. San Diego, CA, USA. February 2020.
- Halstead, K.P., Kiene, R.P., Kieber, D.J., **Krause, J.W.** An LC Method Development: Quantifying the Dimethylsulfoniopropionate (DMSP) pre-cursor S-Methylmethionine (SMM) using Sodium Acetate with Tetrahydrofuran and o-phthaldialdehyde+3-mercaptopropionic acid (OPA-MPA). Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. San Diego, CA, USA. February 2020.

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- **Krause, J.W.** Have anthropogenic factors hastened diatom nutrient starvation in the Mississippi River Plume? Coastal and Estuarine Research Federation 25th Biennial Conference. Mobile, AL, USA. 3–7 November 2019.
- Deleon, S.N., **Krause**, **J.W.**, Baker, R. Variability in microphytobenthos biomass and isotopic values in northern Gulf of Mexico salt marsh systems. Coastal and Estuarine Research Federation 25th Biennial Conference. Mobile, AL, USA. 3–7 November 2019.
- Cox, T.E., Cebrian, J., Tabor, M., West, L., **Krause, J.W.** A quantitative assessment reveals that diatoms dominate benthic primary production in a mixed seagrass bed. Coastal and Estuarine Research Federation 25th Biennial Conference. Mobile, AL, USA. 3–7 November 2019.
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- Dzwonkowski, B., Coogan, J., Lehrter, J., Wilson, J., Lockridge, G., Dykstra, S., Hagemeyer, A., Robertson, A., Miller, M., **Krause, J.**, DeBose, J., Pickering, R. Bonnet Carre Spillway 2019 event: Environmental Impacts in Mississippi Bight? Gulf States Fisheries Commission 70th Annual Meeting. Biloxi, MS, USA. 16 October 2019.
- Marquez, I.A., Abraham, A., **Krause, J.W.** Marine snow facilitates a novel entry pathway for domoic acid into the marine food web. Alabama Water Resources Conference. Orange Beach, AL, USA. 4–6 September 2019.
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- Kranzler, C., **Krause, J.W.**, Brzezinski, M.A., Edwards, B.R., Biggs, W., Maniscalco, M., McCrow, J., Van Mooy, B., Bidle, K.D., Allen, A.E., Thamatrakoln, K. Silicon limitation facilitates virus infection and mortality in diatoms. The Molecular Life of Diatoms (EMBO Workshop). Norwich, United Kingdom. 14–18 July 2019.
- Kranzler, C., **Krause**, **J.W.**, Brzezinski, M.A., Edwards, B.R., Biggs, W., Maniscalco, M., Van Mooy, B., Bidle, K.D., Allen, A.E., Thamatrakoln, K. Silicon limitation facilitates virus infection and mortality in diatoms. Israeli Society for Microbiology Annual Meeting. Rehovot, Israel. 6-7 March 2019.
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- Fulton, K., Forsch, K., Barbeau, K.A., **Krause, J.W.**, Stukel, M.R. Attenuation of Diatom-Mediated Export in a Coastal Upwelling Filament in the California Current Ecosystem. Association for the Sciences of Limnology and Oceanography (ASLO) Aquatic Sciences Meeting. San Juan, Puerto Rico. 23 February-2 March 2019.
- **Krause**, **J.W.** Has eutrophication altered the flow of primary production in the Fertile Fisheries Crescent? Bays & Bayous Symposium. Mobile, AL, USA. November 2018.
- Acton, S., Marquez, I.A., **Krause, J.W.** Have anthropogenic reductions in dissolved silicon fueled the rise of *Pseudo-nitzchia* spp. in the coastal Gulf of Mexico? Bays & Bayous Symposium. Mobile, AL, USA. November 2018.
- Marquez, I.A., Abraham, A., **Krause, J.W.** A Novel Entry Pathway for Domoic Acid into the Food Web. Bays & Bayous Symposium. Mobile, AL, USA. November 2018.
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- Marquez, I.A., **Krause**, **J.W.**, Tambe, D. Understanding the factors effecting the mechanical strength of diatom shells. 6th Annual NanoBio Summit. Montgomery, AL, USA. 17-18 July 2018.
- McNair, H.M., Brzezinski, M.A., **Krause, J.W.** Diatom populations in an upwelling environment decrease silica content to avoid growth limitation. Woods Hole, MA, USA. 25-28 June 2018.
- Stukel, M.R., Biard, T., **Krause, J.W.**, Ohman, M.D. Large Phaeodaria in the Twilight Zone: Their Role in the Carbon and Silica Cycles. Ocean Carbon & Biogeochemistry Summer Workshop. Woods Hole, MA, USA. 25-28 June 2018.
- **Krause, J.W.**, Duarte, C.M., Agustí, S. Does silicon terminate diatom blooms in the Atlantic sector of the Arctic? Silicamics 2 Symposium: Biogeochemistry and genomics of silicification and silicifiers. University of Victoria, BC, Canada. 6-8 June 2018.
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- Galford, A.M., Dobbins, W.C., Pickering, R.A., Acton, S., **Krause, J.W.** Magnitude and variability of reactive silica in Mississippi River plume sediments. 5th Annual Southeastern Biogeochemical Symposium. Tallahassee, FL, USA. 6-8 April 2018.
- Marquez, I.A., Krause, J.W., Abraham, A. Method Development for Assessing Trophic Transfer of Domoic Acid from *Pseudo-nitzschia* spp. to *Acartia tonsa*. Annual Graduate Research Forum, University of South Alabama, Mobile, AL, USA. March 2018.
- Pickering, R.A., **Krause, J.W.**, Michalopoulos, P. Silicon Sorption Capacities on Mississippi River Plume Sediments. Annual Graduate Research Forum, University of South Alabama, Mobile, AL, USA. March 2018.
- Biard, T., **Krause, J.W.**, Stukel, M.R., Ohman, M.D. Unravelling the Contribution of Large Phaeodaria (Rhizaria) to Silicon Fluxes: Insights from the California Current Ecosystem Long Term Ecological Research Site. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. Portland, OR, USA. February 2018.
- Cole, L.K., **Krause, J.W.**, Thamatrakoln, K. Phytoplankton Derived Transparent Exopolymer Particle Response to Oiling. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. Portland, OR, USA. February 2018.
- **Krause, J.W.** Do other players in the marine Si cycle overturn diatom dominance of annual biogenic silica production rates? Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. Portland, OR, USA. February 2018.
- Lomas, M.W., Baer, S., Acton, S., **Krause, J.W.** Species specific variability of biogeochemical traits in polar diatoms. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. Portland, OR, USA. February 2018.
- Marquez, I.A., **Krause, J.W.**, Abraham, A. Method Development for Assessing Trophic Transfer of Domoic Acid from *Pseudo-nitzschia* spp. to *Acartia tonsa*. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. Portland, OR, USA. February 2018.

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- McNair, H., Brzezinski, M.A., Till, C.P., **Krause, J.W.** Taxon-specific contribution to elemental cycling in natural diatom assemblages. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. Portland, OR, USA. February 2018.
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- Rhee, J., **Krause**, **J.W.**, Dzwonkowski, B. Nutrient Flux and Physical Stability Drive Phytoplankton Biomass Variability Along the Alabama Shelf. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. Portland, OR, USA. February 2018.
- Cole, L. K., **Krause, J. W.**, Latham, J., Thamatrakoln, K. Phytoplankton Derived Transparent Exopolymer Particle Response to Oiling. Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, USA. February 2018.
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- Tabor, M., West, L.A., Cox, E., Cebrian, J., **Krause, J.W.** Epiphytic and Sediment Diatom Production in Mississippi Sound. Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, USA. February 2018.
- Dobbins, W.C., **Krause, J.W.**, Agustí, S., Duarte, C.M., Schultz, I.K., Winding, M., Rowe, K.A., Sejr, M. The Role of Silicon Limitation in Phytoplankton Phenology in a Sub-Arctic Fjord System. American Geophysical Union Fall Meeting. New Orleans, LA, USA. December 2017.
- **Krause, J.W.**, Lomas, M.W. Do microzooplankton grazers control biomass of large-phytoplankton in the northern Bering and Chukchi Seas? American Geophysical Union Fall Meeting. New Orleans, LA, USA. December 2017.
- **Krause, J.W.**, Lomas, M.W. Do microzooplankton grazers control biomass of large-phytoplankton in the northern Bering and Chukchi Seas? American Geophysical Union Fall Meeting. New Orleans, LA, USA. December 2017.
- Marquez, I.A., Abraham, A., **Krause, J.W.** Method development for assessing trophic transfer of domoic acid from *Pseudo-nitzschia* spp. to *Acartia tonsa*. 9th US Symposium on Harmful Algae. Baltimore, MD, USA. November 2017.
- Michalopoulos, P., **Krause**, **J.W.**, Pickering, R.A., Rouselaki, E., Taillefert, M., Rabouille, C., Ragueneau, O., Corvaisier, R. Microbial effects on early diagenetic Si cycling in deep-sea and deltaic sediments. Geological Society of America Conference. Seattle, WA, USA. October 2017.
- Latham, J., Cole, L., Natale, F., **Krause, J.W.**, Thamatrakoln, K. Assessing the Impact of Phytoplankton Community Diversity on the Ecosystem Response to Oil Perturbation. Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, USA. February 2017.
- **Krause, J.W.**, Cole, L.K., Mojzis, A.K., Boyette, A.D. Could We Resolve the Effect of a Future Oil Spill Event on Primary Production in the Mississippi Bight Ecosystem? Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, USA. February 2017.
- Chaplin, A., **Krause**, **J.W.**, Pickering, R.A., Briseño-Avena, C., Deary, A.L., Hernandez, F.J. Magnitude and Spatial Variability of Large Siliceous Particles on the Mississippi-Alabama Shelf during Spring. Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, USA. February 2017.
- Dobbins, W.C., Pickering, R.A., **Krause**, **J.W.** Net Production of Diatom Silica on the Louisiana Shelf. Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, USA. February 2017.
- Cole, L.K., **Krause**, **J.W.**, Thamatrakoln, K. Stress Induced Variation in Transparent Exopolymer Particle Size Frequency Distribution. Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, USA. February 2017.

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- Pickering, R.A., **Krause**, **J.W.** The Role of Diatom Frustule Morphology on the Formation of Reverse Weathering Products. Bays & Bayous Symposium. Biloxi, MS, USA. November 2016.
- Marquez, I.A., **Krause**, **J.W.**, Acton, S.K. Control of diatom silica production and growth by silicic acid availability on the Louisiana Shelf. Bays & Bayous Symposium. Biloxi, MS, USA. November 2016.
- **Krause, J.W.**, Cole, L.K., Boyette, A.D., Mojzis, A. Spatial and temporal variability in primary production within the Mississippi Bight Ecosystem. Bays & Bayous Symposium. Biloxi, MS, USA. November 2016.
- Zepernick, B., **Krause**, **J.W.**, Mortazavi, B. The Influence of Juncus-rhizosphere Dissolved Organic Matter on Coastal Plankton Communities. Gulf Estuarine Research Society and Society of Wetland Scientists Fall 2016 Meeting. Pensacola Beach, FL, USA. November 2016.
- Pickering, R.A., Dobbins, W.C., **Krause, J.W.** bSi Production on the Louisiana Shelf: Internally Remineralized or Externally Supplied? Gulf Estuarine Research Society and Society of Wetland Scientists Fall 2016 Meeting. Pensacola Beach, FL, USA. November 2016.
- Marquez, I.A., **Krause**, **J.W.**, Acton, S.K. Does silicic acid availability control diatom production and growth on the Louisiana Shelf? Gulf Estuarine Research Society and Society of Wetland Scientists Fall 2016 Meeting. Pensacola Beach, FL, USA. November 2016.
- **Krause**, **J.W.** The Coastal Louisiana Silicon Cycling (CLASiC) project. Gulf Estuarine Research Society and Society of Wetland Scientists Fall 2016 Meeting. Pensacola Beach, FL, USA. November 2016.
- Dobbins W.C., **Krause, J.W.**, Morris J.J., Entwistle E., Adkins S.J. Evidence of Black Queen Mutualism in Phytoplankton Communities. Gulf Estuarine Research Society and Society of Wetland Scientists Fall 2016 Meeting. Pensacola Beach, FL, USA. November 2016.
- Cole, L.K., **Krause, J.W.**, Thamatrakoln, K. Seasonal Variability in Phytoplankton Responses to Water Accommodated Petroleum Hydrocarbons in the Northern Gulf of Mexico. 3rd Annual Southeastern Biogeochemical Symposium. Knoxville, TN, USA. March 2016.
- Marquez, I.A., **Krause, J.W.**, Lomas, M.W. Further Examination of Biogeochemical Consequences of Mesoscale Eddies in the Sargasso Sea. 3rd Annual Southeastern Biogeochemical Symposium. Knoxville, TN, USA. March 2016.
- Pickering, R.A., **Krause, J.W.** Diatom Frustule Morphology Effects on the Formation of Reverse Weathering Products. 3rd Annual Southeastern Biogeochemical Symposium. Knoxville, TN, USA. March 2016.
- Cole, L.K., **Krause, J.W.**, Thamatrakoln, K. Seasonal Variability in Phytoplankton Responses to Water Accommodated Petroleum Hydrocarbons in the Northern Gulf of Mexico. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Boyette, A.D., Redalje, D., **Krause, J.W.**, Graham, W.M. Phytoplankton productivity and microzooplankton grazing within planktonic thin layers in the northern Gulf of Mexico. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Baines, S.B., Twining, B.S, **Krause**, **J.W.**, Collier, J., Brzezinski, M.A. Role of *Synechococcus* to Biogenic Silica Cycling in the North Atlantic. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Brzezinski, M.A., **Krause, J.W.**, Twining, B.S., Baines, S.B., Collier, J. Patterns and Regulation of Silicon Accumulation in *Synechococcus* spp. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Collier, J., Brzezinski, M.A., Baines, S.B., **Krause, J.W.**, Ohnemus, D., Twining, B.S. Searching for Potential Silicon-associated Genes in Cyanobacteria. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.

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- **Krause, J.W.**, Brzezinski, M.A., Baines, S.B., Collier, J., Ohnemus, D., Twining, B.S. Picoplankton contribution to biogenic silica stocks and production rates in the Sargasso Sea. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Marquez, I.A., **Krause, J.W.**, Lomas, M.W. Further Examination of Biogeochemical Consequences of Mesoscale Eddies in the Sargasso Sea. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- McNair, H., Brzezinski, M.A., **Krause, J.W.**, Parker, C., Brown, M., Coale, T., Bruland, K.W. Pumping Iron and Silica Bodybuilding. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Ohnemus, D., **Krause, J.W.**, Brzezinski, M.A., Baines, S.B., Collier, J., Twining, B.S. Accumulation and speciation of Si by Synechococcus examined by single-cell synchrotron x-ray fluorescence and bulk x-ray spectroscopy. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Pickering, R.A., **Krause, J.W.** The Role of Diatom Frustule Morphology in the Formation of Reverse Weathering Products. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Williams, C.T., **Krause, J.W.**, Walton, W.C. Understanding the Effects of Diet on Larval Crassostrea virginica: A Comparison of Commercial Concentrates and Live Algal Feed. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.
- Cole, L.K., **Krause, J.W.**, Thamatrakoln, K. Annual Variation in Phytoplankton Abundance due to Water Accommodated Petroleum Hydrocarbon Exposure in the Northern Gulf of Mexico. Gulf of Mexico Oil Spill and Ecosystem Science Conference. Tampa Bay, FL, USA. February 2016.
- Boyette, A.D., **Krause, J.W.**, Greer, A.T., Graham, W.M. Microzooplankton grazing within Planktonic Thin Layers in the northern Gulf of Mexico. Gulf of Mexico Oil Spill and Ecosystem Science Conference. Tampa Bay, FL, USA. February 2016.
- Deary, A.L., Hoover, A.M., Hernandez, F.J., Cowen, R.K., Church, I., **Krause**, **J.W.**, Greer, A.T., Briseño-Avena, C., Boyette, A., Graham, W.M. CONCORDE: Preliminary distribution of plankton along three sampling corridors in the Northern Gulf of Mexico. Gulf of Mexico Oil Spill and Ecosystem Science Conference. Tampa Bay, FL, USA. February 2016.
- Cowen, R.K., Graham, W.M., Hernandez, F.J., **Krause, J.W.**, Howden, S.D., Church, I., Briseño-Avena, C., Greer, A., Deary, A.L. CONCORDE: Preliminary results on measurement of finescale to submesoscale processes driving the distribution and transport of plankton in the highly dynamic coastal shelf system of the GOM. Gulf of Mexico Oil Spill and Ecosystem Science Conference. Tampa Bay, FL, USA. February 2016.
- **Krause, J.W.**, McNair, H., Brzezinski, M.A. Quantitative Determination Of Group-specific Si Uptake In Field Diatom Assemblages. Silicamics Symposium: Biogeochemistry and genomics of silicification and silicifiers. L'Aber Wrac'h, Brittany, FRANCE. September 2015.
- McNair, H., **Krause**, **J.W.**, Brzezinski, M.A. Job Report: Who's Contributing to Silica Production? Silicamics Symposium: Biogeochemistry and genomics of silicification and silicifiers. L'Aber Wrac'h, Brittany, FRANCE. September 2015.
- Thamatrakoln, K., Bidle, K.D., McNair, H., Maniscalco, M., Brzezinski, M.A., Edwards, B.R., Van Mooy, B.A.S., Johnson, M.D., Allen, A.E., Allen, L.Z., **Krause, J.W.** A Multi-faceted Study Of Diatom Bloom Dynamics And Silicon Cycling In The California Coastal Upwelling System. Molecular Life of Diatoms. Seattle, WA, USA. July 2015.
- Maniscalco, M., Brzezinski, M.A., McNair, H., **Krause, J.W.**, Thamatrakoln, K. Building Bridges Between Molecular And Physiological Aspects Of Diatom Silicification. Molecular Life of Diatoms. Seattle, WA, USA. July 2015.

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- McNair, H., Brzezinski, M.A., **Krause, J.W.** Peering Into A 'black Box' Measurement Resolving Groupspecific Silicon Uptake Rates In A Natural Diatom Assemblage. Molecular Life of Diatoms. Seattle, WA, USA. July 2015.
- Cochran, S., **Krause**, **J.W.**, Macy, A. Phytolith Content Variability for Short-form *Spartina alterniflora* in the Northern Gulf of Mexico. Southeastern Biogeochemical Symposium. Atlanta, GA, USA. 2015.
- Marquez, I.A., **Krause, J.W.**, Lomas, M.W. Further Examination of Biogeochemical Consequences of Mesoscale Eddies in the Sargasso Sea. Southeastern Biogeochemical Symposium. Atlanta, GA, USA. 2015.
- Goodie, T., Barletta, R., Krause, J., Sabe, H. Direct Measurement of Intracellular Carotenoids in Macroalgae and Phytoplankton. Southeastern Biogeochemical Symposium. Atlanta, GA, USA. 2015.
- Barletta, R., **Krause**, **J.**, Goodie, T., Sabe, H. Direct Measurement of Intracellular Carotenoids in Macroalgae and Phytoplankton. The University of South Alabama 22nd Annual Graduate Research Forum. Mobile, AL, USA. 2015.
- Edwards, B. R., Collins, J. R., Fredricks, H. F., Ossolinski, J. E., McNair, H., Brzezinski, M. A., **Krause, J. W.,** Thamatrakoln, K., Bidle, K. D., Van Mooy, B. A. Comparative lipidomics link bloom decline to infochemical production in the California upwelling zone. Association for the Sciences of Limnology and Oceanography (ASLO) Aquatic Sciences Meeting. Granada, Spain. 2015.

SEMINARS/PRESENTATIONS (last 10 years only):

2024

- **Krause, J.W.**, Pickering, R., Hong, W.L. "Cold storage" do sediment microbes facilitate silica sequestration in Arctic sediments? Silicamics 4 Symposium: Biogeochemistry and genomics of silicification and silicifiers. Logonna-Daoulas, Brittany (France). 14-18 October 2024.
- **Krause, J.W.**, Rahman, S., Roseburrough, R., Lemke, L., de Souza, G.F. "Reversing" reverse weathering? The effects of extreme weather and seasonality on early diagenesis of biogenic silica. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. 19-23 February 2024.

2023

Krause, **J.W.**, Rahman, S. Do tropical cyclones short-circuit sedimentary elemental sequestration in the northern Gulf of Mexico? Bays & Bayous Symposium. Mobile, AL, USA. January 2023.

2022

Krause, J.W. Does microbial activity promote silica sequestration in the coastal river plume sediments? Institute for Arctic and Alpine Research Seminar Series. University of Colorado Boulder. 7 November 2022.

2021

- **Krause. JW.** Silicon cycling in river plume systems: insights from the northern Gulf of Mexico. The University of Tennessee Knoxville Department of Microbiology Fall Seminar Series. 15 November 2021.
- **Krause, J.W.** Silicon cycling in river plume systems: insights from the northern Gulf of Mexico. OEB Distinguished Scholar Seminar Series. College of Earth, Ocean, and Atmospheric Sciences. Oregon State University. 26 February 2021.

2020

*All in-person seminar invitations cancelled due to covid-19 pandemic

2019

Krause, J.W. The North Atlantic spring phytoplankton bloom: a new spin on an old story. Department of Earth, Ocean and Atmospheric Sciences. Florida State University. 8 March 2019.

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2018

- **Krause, J.W.** Has eutrophication altered the flow of primary production in the Fertile Fisheries Crescent? Bays & Bayous Symposium. Mobile, AL, USA. November 2018.
- **Krause, J.W.**, Duarte, C.M., Agustí, S. Does silicon terminate diatom blooms in the Atlantic sector of the Arctic? Silicamics 2 Symposium: Biogeochemistry and genomics of silicification and silicifiers. University of Victoria, BC, Canada. 6-8 June 2018.
- **Krause, J.W.** Does Silicon limitation terminate diatom spring blooms in the high-latitude Atlantic? Red Sea Research Center Seminar. King Abdullah University of Science and Technology. KINGDOM OF SAUDI ARABIA. 26 February 2018.
- **Krause, J.W.** Do other players in the marine Si cycle overturn diatom dominance of annual biogenic silica production rates? Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU)/ The Oceanography Society (TOS) Ocean Sciences Meeting. Portland, OR, USA. 14 February 2018.

2017

- **Krause, J.W.** Does Silicon limitation terminate the high-latitude Atlantic spring bloom? Georgia Institute of Technology. Atlanta, GA, USA. 12 October 2017.
- **Krause, J.W.** A surprising role for picocyanobacteria in the open-ocean Silicon cycle. King Abdullah University of Science and Technology. KINGDOM OF SAUDI ARABIA. 8 February 2017.
- **Krause, J.W.**, Cole, L.K., Mojzis, A.K., Boyette, A.D. Could We Resolve the Effect of a Future Oil Spill Event on Primary Production in the Mississippi Bight Ecosystem? Gulf of Mexico Oil Spill and Ecosystem Science Conference. New Orleans, LA, USA. February 2017.
- **Krause, J.W.** A surprising role for picocyanobacteria in the open-ocean Silicon cycle. Louisiana State University. Baton Rouge, LA, USA. 20 January 2017

2016

- **Krause, J.W.**, Cole, L.K., Boyette, A.D., Mojzis, A. Spatial and temporal variability in primary production within the Mississippi Bight Ecosystem. Bays & Bayous Symposium. Biloxi, MS, USA. November 2016.
- **Krause, J.W.** The Coastal Louisiana Silicon Cycling (CLASiC) project. Gulf Estuarine Research Society and Society of Wetland Scientists Fall 2016 Meeting. Pensacola Beach, FL, USA. November 2016.
- **Krause**, **J.W.** "Silicon uptake and accumulation in picocyanobacteria." University of Southern Mississippi Division of Marine Sciences. Stennis Space Center, MS, USA. 23 September 2016.
- **Krause, J.W.**, Brzezinski, M.A., Baines, S.B., Collier, J., Ohnemus, D., Twining, B.S. Picoplankton contribution to biogenic silica stocks and production rates in the Sargasso Sea. Association for the Sciences of Limnology & Oceanography (ASLO)/ American Geophysical Union (AGU) Ocean Sciences Meeting. New Orleans, LA, USA. February 2016.

2015

- **Krause, J.W.** "Laboratory and Field Assessment of Silicon uptake and Accumulation in Picocyanobacteria" Labex OT-Med and MIO (Mediterranean Institute of Oceanography) Seminar. Marseille, FRANCE. 1 October 2015.
- **Krause, J.W.**, McNair, H., Brzezinski, M.A. Quantitative Determination Of Group-specific Si Uptake In Field Diatom Assemblages. Silicamics Symposium: Biogeochemistry and genomics of silicification and silicifiers. L'Aber Wrac'h, Brittany, FRANCE. 24 September 2015.
- **Krause, J.W.** "Group-specific Silicon uptake rates by field diatoms and the role of Silicon in structuring coastal planktonic food webs." Environmental Protection Agency. Gulf Breeze, FL, USA. 15 July 2015.

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Barletta, R., **Krause, J. (presenting author)**, Goodie, T., Sabe, H. Direct Measurement of Intracellular Carotenoids in Macroalgae and Phytoplankton. The University of South Alabama 22nd Annual Graduate Research Forum. Mobile, AL, USA. 18 March 2015.

Krause, J.W. "Does silicon structure coastal planktonic food webs?" Rutgers University. New Brunswick, NJ, USA. 10 March 2015.

Krause, J.W. "Silicon-cycling on the Louisiana Shelf: current knowledge & future directions." University of West Florida. Pensacola, FL, USA. 30 January 2015.

TEACHING: (DISL = Dauphin Island Sea Lab, USA = University of South Alabama)

Status: Class Listing (#times taught). Institution. Years/Date.

Instructor: Marine Operations & Research (3). USA. 2023 - 2025.

Instructor: Marine Sciences Seminar (2). USA. 2014, 2021.

Instructor: Physiology and ecology of marine microalgae (2). USA. 2014, 2018 (Directed Study).

Instructor: Oceanographic Experience (6 sessions). USA, 2020 – 2024.

Instructor: Biological Oceanography (9). USA. 2015 – 2022, 2024.

Instructor: Introduction to Oceanography (11). DISL. 2014 – 2024.

Teaching Assist.: Coastal Oceanography. Oregon State University. 2008.

Teaching Assist.: Biological Oceanography. Bermuda Bio. St. Research. 2006.

Teaching Assist.: Biological Oceanography. Oregon State University. 2006.

Guest Lecture: Essentials of Oceanography and Marine Biology. USA. 15 Oct. 2019.

Guest Lecture: Introduction to Oceanography. DISL. 3 Jun. 2013.

Guest Lecture: Coastal Oceanography (4 lectures). Oregon State University. Feb. - Mar. 2008.

Guest Lecture: Biological Oceanography. Bermuda Bio. St. Research. 31 Mar. 2006.

Guest Lecture: Biological Oceanography. Oregon State University. 28 Feb. 2006.

SCIENTIFIC/ EDUCATIONAL OUTREACH (last 10 years only):

2024

Krause, J.W. "Oceanography Merit Badge." Thanksgiving Camp, Dauphin Island Sea Lab. 23 November 2024.

Krause laboratory. "Oceanographic Field Cruise." Field experience for high school students at McDonald County High School (Anderson, MO). Dauphin Island Sea Lab. 26 October 2024.

Krause, J.W. "Living in a Phytoplankton World." Presentations to 2nd Grade Class of Robin De Graaf, respectively. Council Traditional School. Mobile, AL. 14 May 2024.

Krause, J.W. "Phytoplankton." Guest speaker in Dauphin Island Sea Lab Discovery Hall Program Plankton workshop. Dauphin Island Sea Lab. 11 April 2024

2023

Krause, J.W. "Oceanography Merit Badge." Thanksgiving Camp, Dauphin Island Sea Lab. 18 November 2023.

Krause, J.W. "Living in a Phytoplankton World." Two presentations to 4th and 2nd Grade Classes of Joia Juzang and Robin De Graaf, respectively. Council Traditional School. Mobile, AL. 5 May 2023.

Krause, J.W. "Working at Sea aboard the R/V Discovery (Field Trip)" Alabama School of Math and Science (Dr. Natalie Ortell's Class). Mobile, AL. 7 April 2023.

Krause, J.W. "Oceanography Merit Badge." Jag Merit Badge Clinic, University of South Alabama at the Dauphin Island Sea Lab. 25 March 2023.

Krause, J.W. "Living in a Phytoplankton World." Alabama School of Math and Science (Dr. Rebecca Domangue's Class). Mobile, AL. 23 March 2023.

Krause, J.W. "Extreme Silica." Boardwalk Talk series, Aquarium of Alabama at the Dauphin Island Sea Lab. 7 September 2022.

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Krause, J.W. "Oceanography Merit Badge." Jag Merit Badge Clinic, University of South Alabama at the Dauphin Island Sea Lab. 2 April 2022.

202

- **Krause, J.W.** "Living in a Phytoplankton World." Discovery Hall High School Summer School, Dauphin Island Sea Lab. 1 July 2021.
- **Krause, J.W.** "Silicon, the 'Jack of all Trades' in Earth's Climate System." World Ocean Day series at the Dauphin Island Sea Lab. 8 June 2021. https://youtu.be/EqnC4a3HyLM

2020

- **Krause**, **J.W.** and Wang, X. "Clays Cause Climate Change?" Boardwalk Talk series at the Dauphin Island Sea Lab Estuarium. 21 October 2020.
- **Krause, J.W.** "Living in a Phytoplankton World." Discovery Hall High School Summer School, Dauphin Island Sea Lab. 14 July 2020.

2019

Levins, A. and **Krause, J.W.** "Peering into Nature's Glass Boxes." YouTube Channel Boardwalk Talk series at the Dauphin Island Sea Lab Estuarium. https://youtu.be/2WnL-wmXxiw

2018

- **Krause, J.W.** "Peering into Nature's Glass Boxes." Boardwalk Talk series at the Dauphin Island Sea Lab Estuarium. 17 October 2018.
- **Krause, J.W.** "Living in a Phytoplankton World." Discovery Hall High School Summer School, Dauphin Island Sea Lab. 18 June 2018.
- **Krause, J.W.**, Marquez, I.A., Pickering, R.A. "Thank you, plankton." Council Traditional School. Presentation to 2nd Grade Class of Camille Brooks. 7 May 2018.

2017

- **Krause, J.W.** "Phytoplankton Ecology Laboratory: Dauphin Island Sea Lab." Dauphin Island Sea Lab Foundation Monthly Meeting. 15 August 2017
- **Krause, J.W.**, Marquez, I.A., Pickering, R.A. "An introduction to plankton." Council Traditional School. Presentation to 1st Grade Class of Stephanie Gavin. 18 May 2017
- **Krause, J.W.** "Like to breathe? Thank phytoplankton!" (adapted from "Breath Calculation" activity about phytoplankton, National Geographic Education activity, www.education.nationalgeographic.com). Dauphin Island Sea Lab: Discovery Day. 8 April 2017.
- **Krause, J.W.** "Phytoplankton petting zoo." Dauphin Island Sea Lab: Discovery Day. 8 April 2017.

2016

- **Krause**, **J.W.** "Ocean Acidification ... the other CO₂ Problem." Discovery Hall Teachers Workshop, Dauphin Island Sea Lab. 19 June 2016.
- **Krause, J.W.**, Cole, L.K., Marquez, I.A. "An introduction to plankton." Christ United Methodist Church Kids Crossing. Presentation to PreK-4 Class of Kathy Kendall. 11 May 2016
- **Krause, J.W.,** "Gulf Detectives at Dauphin Island Sea Lab." (One of Five Guest Scientists Credited). Alabama Public Television: IQ Learning Network. Original Webcast 9 March 2016. *12,699 students participated live. Streaming recording available online at http://aptv.us1.list-manage.com/track/click?u=40e4e3c446984ebb0f13b7658&id=155cfdbb78&e=0b47b0feb9

2015

- **Krause, J.W.,** Acton, S. "FlowCAM: a new tool for examining phytoplankton in Mobile Bay and on the Mississippi-Alabama shelf." Dauphin Island Sea Lab: Discovery Day. 11 April 2015.
- **Krause, J.W.** "Like to breathe? Thank phytoplankton!" (adapted from "Breath Calculation" activity about phytoplankton, National Geographic Education activity, www.education.nationalgeographic.com). Dauphin Island Sea Lab: Discovery Day. 11 April 2015.
- Krause, J.W. "Phytoplankton petting zoo." Dauphin Island Sea Lab: Discovery Day. 11 April 2015.

PRESS/SOCIAL/BLOG (last 10 years only):

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- "Expedition Blog: Live from the Research Vessel Pelican." Written by Mendel Graeber. Dauphin Island Sea Lab. September 30, 2024. https://www.disl.edu/news/2024/expedition-blog-live-from-the-research-vessel-pelican/
- **"Expedition Blog: How a previous research project sparked the QUALIFIED Project."** Written by Mendel Graeber. Dauphin Island Sea Lab. September 26, 2024. https://www.disl.edu/news/2024/expedition-blog-how-a-previous-research-project-sparked-the-qualified-project/
- **"Expedition Blog: In the Field with Aquarium Educator Mendel Graeber."** Written by Mendel Graeber. Dauphin Island Sea Lab. September 17, 2024. https://www.disl.edu/news/2024/expedition-blog-in-the-field-with-aquarium-educator-mendel-graeber/
- **"Expedition Student Blog: Adventure is out there!"** Written by Lindsey Lemke. Dauphin Island Sea Lab. 10 May 2022. https://www.disl.edu/about/news/expedition-student-blog-adventure-is-out-there
- "DISL partakes in international research studying Arctic ice." Written/produced by Caroline Carithers. WKRG, Mobile, AL. March 29, 2021. https://www.wkrg.com/digital-mojo/disl-partakes-in-international-research-studying-arctic-ice/
- "Tracing Silicon to Learn About Diatoms." Written by Alexandra Smith. Coastal Upwelling Systems in a Changing Ocean Blog. March 13, 2020. https://www.oceanblogs.org/cusco/2020/03/13/tracing-silicon-to-learn-about-diatoms/
- "Research at Dauphin Island Sea Lab is looking at detecting Vibrio bacteria in our waterways."

 Written/produced by Caroline Carithers. WKRG, Mobile, AL. January 15, 2020.

 https://www.wkrg.com/mobile-county/research-at-dauphin-island-sea-lab-is-looking-at-detecting-vibrio-bacteria-in-our-waterways/
- "Study finds stressed diatoms susceptible to viruses." Written by Angela Levins. Dauphin Island Sea Lab. October 29, 2019. https://www.disl.org/about/news/study-finds-stressed-diatoms-susceptible-to-viruses
- "Pumped up by the cold: Increased elemental density in polar diatoms." OCB Science Highlights. October 28, 2019. https://www.us-ocb.org/pumped-up-by-the-cold-increased-elemental-density-in-polar-diatoms/
- "Alabama Leadership Initiative unveils 2019-2020 class." Written by Ashley Whatley, Kate Cotton. Birmingham Business Journal. October 15, 2019. <a href="https://www.bizjournals.com/birmingham/news/2019/10/14/alabama-leadership-initiative-unveils-2019-2020.html?ana=e_me_set1&j=84409751&t=Morning&mkt_tok=eyJpIjoiTm1aaU1URmhORGRoT0_RZMCIsInQiOiJUYStjZG43SGJxTzJZMlRzdm5DM1lyRGhWQjJOc0lGbW5ndHc0TkZjNFwvaUt6_NEtXR3JyWXVyeXY3TVplTjFIT3BSXC81VVwvSW1aMHl0QlQ4WHRHZkRqS1pDc1k2VloxbV
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