BRITTANY N. ZEPERNICK - *CV*

zepernickb@uncw.edu · https://orcid.org/0000-0003-3121-1225

CURRENT EMPLOYMENT

2026-current - Assistant Professor, Dept. Biology & Marine Biology, University of North Carolina Wilmington

EMPLOYMENT HISTORY

2024-2025 - NSF OCE Postdoctoral Fellow, Dept. of Earth, Marine and Environmental Sciences, *UNC Chapel Hill*
Funding: NSF Ocean Sciences Postdoctoral Research Fellowship, PI: Dr. Brittany Zepernick
Sponsors: Dr. Adrian Marchetti (primary sponsor), Dr. Laura Gomez-Consarnau, Dr. William Sunda

2023-2024 - SEC Postdoctoral Fellow & Lecturer, Dept. of Microbiology, University of Tennessee Knoxville
Funding: Southeastern Conference Emerging Scholars Postdoctoral Fellowship Program
Supervisors: Dr. Steven W. Wilhelm and Graduate School Dean Dr. Dixie L. Thompson

EDUCATION

2018-2023 - PhD. Microbiology, Aquatic and Microbial Ecology, *University of Tennessee Knoxville*
Dissertation: Investigating Drivers of Algal Bloom Succession in Lake Erie
Funding: NSF Graduate Research Fellow Program, TN Fellowship for Graduate Excellence
Supervisors: Dr. Steven W. Wilhelm (PI), Dr. George S. Bullerjahn, Dr. Eric R. Zinser, Dr. Jill A. Mikucki

2014-2017 - Honors B.S. Biology, Specialization in Marine & Aquatic Science, *Bowling Green State University*
Honors Thesis: The Influence of Juncus-Rhizosphere Dissolved Organic Matter on Coastal Plankton
Funding: NSF Research Experience for Undergraduates Fellowship, BGSU Honors Program Scholarship
Supervisors: Dr. George S. Bullerjahn, Dr. R. Michael. L. McKay, Dr. Jeffrey W. Krause, Dr. Behzad Mortazavi

RESEARCH GRANTS & FUNDING:

Nationally competitive grants from US federal agencies (*active)

2026* **Dept. of Energy Joint Genome Institute Community Sequencing Program New Investigator,** *UNCW*
Award amount: TBD (sequencing of meta 'omic samples). *PI: Dr. Brittany Zepernick*

2023* **National Science Foundation Ocean Sciences Postdoctoral Research Fellowship,** *UNC Chapel Hill*
Award amount: $298,228 (total), $167,500 (direct). PI: Dr. Brittany Zepernick

2022 **National Science Foundation: Advanced Studies Institute on HABs in Lake Victoria, Kenya,** *UTK*
Award amount: $3,000 (travel) ($9,216.10 sequencing) from Co-PIs of award to Brittany Zepernick

2020 **National Science Foundation: Graduate Research Fellowship Program,** *UTK*
Award amount: $132,200 (salary and cost of education allowance) PI: Brittany Zepernick

2020 **American Society for Microbiology: Young Ambassador Project,** *UTK*
Award amount: $2,500 (project costs). PI: Brittany Zepernick and Dr. Matthew Tuttle

2019 **NOAA Student Travel Award, *US Harmful Algal Bloom Conference,*** *UTK*
Award amount: $793 (travel and accommodations) to Brittany Zepernick

2016 **National Science Foundation- Research Experience for Undergraduates,** *Dauphin Island Sea Lab*
Award amount: $5,000 (direct costs) *to Brittany Zepernick*

**Total gross estimate of federal funds awarded: $450,937*

University-wide competitive grants

2023 **Southeastern Conference Emerging Scholars Postdoctoral Fellowship,** *University of Tennessee*
Award amount: $70,000 (direct). PI: Dr. Brittany Zepernick

2022 **University of Tennessee Knoxville Graduate Student Senate Travel Award**
Award amount: $1,100 (travel and accommodations)

2020 **Illumina-UTK Genomics Core Sequencing Mini Grant,** *University of Tennessee*

Award amount: $2,000 (sequencing). PI: Brittany Zepernick & Steven Wilhelm

2019 **Tennessee Fellowship for Graduate Excellence,** *University of Tennessee*
Award amount: $276,000 (total), $96,000 (direct), awardee: Brittany Zepernick

**Total gross estimate of university funds awarded: $349,100*

AWARDS & ACCOLAIDES:

2025 **Awarded the ISME Journal Best Paper of the Year (2024) Award**
2024 **Awarded Top Cited Article of 2022-2023 in Environmental Microbiology Reports**
2023 **Jimmy and Ileen Cheek Graduate Student Medal of Excellence, University of Tennessee**
2023 Dept. Biology Cokkinias & Fite Award, Excellence in Graduate Research, University of Tennessee
2023 Dept. Microbiology Excellence in Graduate Research Hutson Award, University of Tennessee
2020 Graduate Student Spotlight Recipient, Office of Research, University of Tennessee
2020 Data as Art Award, Microbiology Departmental Awards, University of Tennessee

SCIENTIFIC PUBLICATIONS:

Manuscripts in revision or in press:

1. Ives, J.T., **Zepernick, B.N.,** Said, A., Obuya, J.A., Migeni, A.Z., Hamisi, A.A., Lawrence, T., Gauthier, N., Besa K., Basu, A., Achieng, A.O., (2026 in review at the *Journal of Great Lakes Research*). Many nations sharing many problems: The benefits and challenges of transboundary science in Great Lakes Research.

Manuscripts published in peer-reviewed journals:

1. **Zepernick, B.N.,** Niknejad, D.J., Chase, E.E., Abiodun, B.A., Adler, M.J., Houghton, K.A., Olavesen, J.L., Sarumi, Q., Truchon, A.R., Walton, J.L., Cheshire, J.H., Stanislawczyk, K., Paerl, H.W., Chaffin, J.D., Boyer, G.L., Castro, H.F., Campagna, S.R., Bullerjahn, G.S., Wilhelm, S.W. (2025). The ornithine-arginine cycle supported a toxic, metalimnic *Planktothrix rubescens* bloom. *Harmful Algae* https://doi.org/10.1016/j.hal.2025.103008
   *****Manuscript product of MICR 669 course with student coauthors**

2. Huang, X., Wu, H., **Zepernick, B.N.,** Loa, A., Sun, H., Huang, S., Zheng, Z. (2025). Micro- and nanoplastic stress intensifies *Microcystis aeruginosa* physiology and toxin risks under environmentally relevant waster chemistry conditions. *Journal of Hazardous Materials*. https://doi.org/10.1016/j.jhazmat.2025.140411

3. Huang, X., Chase, E.E., **Zepernick, B.N**., Martin, R.M., Krausfeldt, l.E., Pound, H.L., Wu, H., Zheng, Z., Wilhelm, S.W. (2025). Contrasting viral infection strategies for single cell and colonial *Microcystis* populations consistent with Black Queen dynamics. *ISME Journal*. https://doi.org/10.1093/ismejo/wraf244

4. Hart, L.N., **Zepernick, B.N.,** Natowra, K.E., Brown, K.M., Obuya, J.A., Lomeo, D., Barnard, M., Okech, E.O., Kiledal, E.A., Den Uyl, P.A., Achieng, D., Barker, K.B., Basweti, G.M., Beal, M., Byrne, A., Cody, W.R., Kiteresi, L.I., Lawrence, T., Miruka, J.B., Mohney, S., Okutoyi, P., Otieno, D., Owino,m O.A., Owoko, W., Owuor, B., Shitandi, A., Stoll, J., Swaleg, M.N., Tebbs, E.J., Varga, E., Adem, J.A., Adhikari, A., Allan, T., Chepkirui, M., Khan., N.N., Moseti, M., Achieng, T., Radock, L., Olokotum, M., Wilhelm, S.W., McKay, R.M.L., Droulliard, K.G., Sherman, D.H., Sitoki, L., Achiya, J., Getabu, A., Otiso, K.M., Bullerjahn,, G.S., Dick, G.J. (2025). Metagenomics reveals spatial variation in cyanobacterial composition, function, biosynthetic potential in Winam Gulf, Lake Victoria, Kenya. *ASM Applied & Environmental Microbiology*. https://doi.org/10.1128/aem.01507-24

5. **Zepernick, B.N.,** Hart, L.N., Chase, E.E., Natwora, K.E., Obuya, J.A., Olokotum, M., Houghton, K.A., Kiledal, E.A., NSF-IRES 2022 Lake Victoria Research Consortium, Sheik, C.S., Sherman, D.H., Dick, G.J., Wilhelm,

S.W., Sitoki, L., Otiso, K.M., McKay, M.L., Bullerjahn, G.S. (2024e). Molecular investigation of harmful cyanobacteria reveals hidden risks and niche partitioning in Kenyan lakes. *Harmful Algae.* https://doi.org/10.1016/j.hal.2024.102757

6. **Zepernick, B.N.,** Hart, L.N., Natwora, K.E., Brown, K.M., Obuya, J.A., Olokotum, M., Okech, E.O., Keating, N.G., Lomeo, D., Tebbs, E.J., NSF-IRES 2022-2023 Lake Victoria Research Consortium, Sheik, C.S., Sherman, D.H., Dick, G.J., Wilhelm, S.W., Droulliard, K.G., Lawrence, T., Getabu, A., Owuor, B., Shitandi, A., Omondi, R., Njiru, J., Sitoki, L., Otiso, K.M., McKay, M.L., Bullerjahn, G.S. (2024d). Metagenomic sequencing of cyanobacterial dominated Lake Victoria – an African Great Lake. *ASM Microbiology Resource Announcements*. https://doi.org/10.1128/mra.00798-24

7. **Zepernick, B.N.,** Boegehold, A.G., Kiledal, E.A., Chase, E.E., Hart, L.N., Houghton, K.A., Martin, R.M., Williams, P.A., Johnson, E.C., Schofield, P.K., Cory, R.M., Chaganti, S.R., Godwin, C.M., Spanbauer, T.L., Dick, G.J., Errera, R.M., Wilhelm, S.W. (2024c). Diel metatranscriptomes capture cyanobacteria-dominated Lake Erie community response to episodic events. *ASM Microbiology Resource Announcements.* https://doi.org/10.1128/mra.00659-24

8. Obuya, J.A., Onyango, H.O., Olokotum, M., **Zepernick, B.N.,** Natwora, K., Otieno, D., Owoko, W., Achieng, D., Otuo, P.W., Keyombe, J.L. (2024). Socioeconomic consequences of cyanobacterial harmful algal blooms in small-scale fishing communities of Winam Gulf, Lake Victoria. *Journal of Great Lakes Research.* https://doi.org/10.1016/j.jglr.2023.09.007

9. Denison, E.R., **Zepernick, B.N.,** McKay, R.M.L., Wilhelm, S.W. (2024). Metatranscriptomic analysis reveals dissimilarity in viral community activity between an ice-free and ice-covered winter in Lake Erie. *ASM Msystems.* https://doi.org/10.1128/msystems.00753-24

10. **Zepernick, B.N.,** McKay, R.M.L., Martin, R.M., Bullerjahn, G.S., Paerl, H.W, Wilhelm, S.W. (2024b). A tale of two blooms: Do ecological paradigms for algal bloom success and succession require revisiting? *Journal of Great Lakes Research.* https://doi.org/10.1016/j.jglr.2024.102336

11. **Zepernick, B.N.,** Chase, E.E., Denison, E.R., Gilbert, N.E., Truchon, A.T., Frenken, T., Cody, W.R., Martin, R.M., Chaffin, J.D., Bullerjahn, G.S., McKay, R.M.L., Wilhelm, S.W (2024a). Declines in ice cover are accompanied by light limitation responses and community change in freshwater diatoms. *ISME Journal.* https://doi.org/10.1093/ismejo/wrad015
*****Awarded The ISME Journal Best Paper Award 2024.**

12. **Zepernick, B.N.,** Wilhelm, S.W., Bullerjahn, G.S., Paerl, H.W (2023). Climate change and the aquatic continuum: A cyanobacterial comeback story. *Environmental Microbiology Reports.* https://doi.org/10.1111/1758-2229.13122
*****Awarded Top Cited Article of 2022-2023 in Environmental Microbiology Reports.**

13. **Zepernick, B.N.,** Niknejad, D.J., Stark, G.S., Truchon, A.R., Martin., R.M., Rossignol, K.L., Paerl, H.W., Wilhelm, S.W (2022c). Morphological, physiological and transcriptional responses of the freshwater diatom *Fragilaria crotonensis* to elevated pH conditions. *Frontiers in Microbiology.* https://doi.org/10.3389/fmicb.2022.1044464

14. **Zepernick, B.N.,** Truchon, A.R., Gann, E.R., Wilhelm., S.W. (2022b). Draft genome sequence of the freshwater diatom *Fragilaria crotonensis* 28.96. *ASM Microbiology Resource Announcements.* https://doi.org/10.1128/mra.00289-22

15. **Zepernick, B.N.,** Denison, E.R., Chaffin, J.D., Bullerjahn, G.S., Pennachio, C.P., Frenken, T., Peck, D.H., Anderson, J.Y., Niles, D., Zastepa, A., McKay, R.M.L., Wilhelm, S.W. (2022a). Metatranscriptomic

sequencing of winter and spring planktonic communities from Lake Erie – a Laurentian Great Lake. *ASM Microbiology Resource Announcement.* https://doi.org/10.1128/mra.00351-22

16. Pound, H.L., Martin, R.M., **Zepernick, B.N.,** Christopher, C.J., Howard, S.M., Castro, H.F., Campagna, S.R., Boyer, G.L., Bullerjahn, G.S., Chaffin, J.D., Wilhelm, S.W. (2022). Changes in microbiome activity and sporadic viral infection help explain observed variability in microcosm studies. *Frontiers in Microbiology.* https://doi.org/10.3389%2Ffmicb.2022.809989

17. **Zepernick, B.N.,** Gann, E.R., Martin, R.M., Pound, H.L., Krausfeldt, L.E., Chaffin, J.D., Wilhelm, S.W. (2021). Elevated pH conditions associated with *Microcystis spp.* blooms decrease viability of the cultured diatom *Fragilaria crotonensis* and natural diatoms in Lake Erie. *Frontiers in Microbiology.* https://doi.org/10.3389/fmicb.2021.598736

18. **Zepernick, B. N.,** Krausfeldt, L. E., Wilhelm, S. W. (2020). Flaming as part of aseptic technique increases $CO_{2\,(g)}$ and decreases pH in freshwater culture media. *Limnology and Oceanography: Methods*. https://doi.org/10.1002/lom3.10355

19. Krausfeldt, L. E., Farmer, A. T., Castro Gonzalez, H., **Zepernick, B. N.,** Campagna, S. R., & Wilhelm, S. W. (2019). Urea is both a carbon and nitrogen source for *Microcystis aeruginosa*: tracking ^{13}C incorporation at bloom pH conditions. *Frontiers in Microbiology.* https://doi.org/10.3389/fmicb.2019.01064

TEACHING EXPERIENCE:

2024 **EMES 444 – Marine Phytoplankton** (3 credit hrs), *University of North Carolina at Chapel Hill*
*Guest lecturer and facilitator of peer-reviewed paper discussions

2024* **MICR 669 - Advanced Field Techniques in Microbiology** (3 credit hrs), *University of Tennessee*
***Course creator and primary instructor of record**

2023 **MICRO 594 - Grant Writing** (3 credit hrs), *University of Tennessee*
*Co-instructor along with Dr. Steven Wilhelm

2023 **MICRO 459/559 – Introduction to Oceanography** (3 credit hours), *University of Tennessee*
*Guest lecturer on polar oceans unit

2023 **MICRO 495 –Senior Seminar: Perspectives in Microbiology** (3 credit hrs), *University of Tennessee*
*Graduate teaching assistant

2022 **MICRO 594 – Grant Writing** (3 credit hours), *University of Tennessee*
*Graduate teaching assistant

PROFESSIONAL DEVELOPMENT WORKSHOPS AND CERTIFICATIONS:

2025 **Ocean Observatories Initiative Facility Board's ImagingFlow Cytobot Focus Group, *UNC Wilmington***

2025 **Ecological Dissertation in Aquatic Sciences Symposium, *University of Hawai'i***

2023 Building Course-based Authentic Learning Experiences Workshop, *University of Tennessee*

2023 SEC Emerging Scholars Academic Career Preparation Workshop *University of Arkansas*

2022 Curriculum development with Knox County Middle School Teachers, *University of Tennessee*

2019 **Center for Integration of Research, Teaching, Learning - Scholar Certification, *University of Tennessee***
Proof of certification available upon request

2019 Best Practices in Teaching and Publishing Certifications, *University of Tennessee*

INVITED RESEARCH SEMINARS:

2025 ***Dauphin Island Sea Laboratory, Dauphin Island, Alabama.*** Hosts: Dr. Ruth Carmichael, Dr. Jeff Krause
Zepernick et al., Decoding how diatoms respond to ecological disturbances across the aquatic continuum

2023 ***Department of Biology & Environment, Linnaeus University, Sweden*.** Host: Dr. Anabella Aguilera
Zepernick, B.N., *et al.,* The "Other" Algal Bloom Problem: Elucidating Effects of cHAB Basification

2023 ***Great Lakes Winter Network (GLWiN), University of Minnesota Duluth*.** Host: Dr. Ted Ozersky

Zepernick, B.N., *et al.,* Lake Erie Winter Diatom Responses to Declining Ice Cover

CONTRIBUTED CONFERENCE PRESENTATIONS:

2025 *Great Lakes Center for Freshwaters & Human Health Meeting, Ann Arbor, MI, US*
Zepernick, B.N., et al., Cyanobacterial expression exhibited diel partitioning over the course of a Lake Erie bloom. Poster presentation, workshop participant.

2025 *Association for Limnology & Oceanography, Charlotte, NC, US*
Zepernick, B.N., et al., Multi 'omics indicate depth-discrete partitioning of nitrogen metabolism in a toxic, winter *Planktothrix rubescens* bloom. Oral Presentation.

2025 *Polar Marine Science Gordon Research Conference, Lucca, Italy*
Zepernick, B.N., *et al.,* Investigating proton-pumping rhodopsin contributions to energy production under varying light quality and iron limitation in Southern Ocean diatoms. Poster presentation, Discussion leader

2024 *International Association of Great Lakes Research, Windsor, ON, CA*
Zepernick, B.N., *et al.,* Declines in Ice cover are Accompanied by Light Limitation Responses and Community Change in Freshwater Diatoms. Oral Presentation
*****Lead session chair: Recent Advances in Winter Limnology in a Changing Climate**

2024 *International Association of Great Lakes Research, Windsor, ON, CA*
Zepernick, B.N., *et al.,* The "Other" Algal Bloom Problem: Elucidating the Effects of Cyanobacterial-Induced Lake Basification on *Microcystis aeruginosa*. Oral Presentation

2023 *National Oceans and Human Health Conference, Florida Gulf Coast University, FL, US*
Zepernick, B.N., *et al.,* Lake Erie Winter Diatom Responses to Declining Ice Cover. Oral Presentation

2021 *National Oceans and Human Health Conference, Bowling Green, OH*
Zepernick, B.N., *et al.,* Effects of HAB-induced Lake Basification on diatoms. Oral presentation

2020 *National Oceans and Human Health Center Conference (Woods Hole, MA)*
***Session Rapporteur/participant: HABs in the freshwater-marine continuum**

2019 *US Harmful Algal Blooms National Symposium (Orange Beach, AL)*
Zepernick, B.N., *et al.,* Bloom-induced pH effects on freshwater diatoms. Oral presentation

2019 *University of Tennessee Knoxville Microbiology Department Research Symposium*
Zepernick, B.N., *et al.,* Effects of Aseptic Flaming on pH of Freshwater Culture Media. Poster presentation

2016 *Gulf Estuarine Regional Symposium (Pensacola, FL)*
Zepernick, B.N., *et al.,* Influence of Juncus-rhizosphere DOM on Coastal Plankton. Poster presentation

RESEARCH SUPERVISORY ROLES / MENTEES:

***Resulted in authorship on peer-reviewed publications and/or MICR 669 manuscript in coauthor revision**

2025 - 2026 **Abigail Russ (Undergraduate student),** *University of North Carolina at Chapel Hill*
*Mentorship in trace metal clean methods, marine diatom culture techniques, growth assays

2024-2026 **Margarita Lankford (Msc student),** *University of North Carolina at Chapel Hill*
***Committee member:** Mentoring in nanopore sequencing, metagenomics

2023-2025* **Lauren Hart (PhD candidate),** *University of Michigan, NSF-IRES ASI in Lake Victoria*
Mentorship in experimental design, metagenomics, manuscript drafting, peer-reviewing
*Coauthorship on 3 papers, 1 in coauthor revision

2024 May-Aug* **Xuhui Huang (PhD candidate),** *Fudan University, Shanghai – visiting University of Tennessee*
Mentorship in environmental metatranscriptomic dataset processing and bioinformatics
*Manuscript in prep

2024 Jan-Aug* **Jason Olavesen (PhD student),** *University of Tennessee*
Mentorship in transcriptomics, field techniques, experimental design, metagenomics
*Coauthorship on 1 manuscript in coauthor revision, 1 paper in prep

2024 Jan-Aug* **Meaghan Adler (PhD candidate),** *University of Tennessee*
Mentorship in field techniques, experimental design, environmental metagenomics
*Coauthorship on 1 paper in coauthor revision

2024 Jan-Aug* **Jillian Walton (PhD candidate),** *University of Tennessee*
Mentorship in field techniques, experimental design, physiochemical data analysis
*Coauthorship on 1 paper in coauthor revisions

2024 Jan-Aug* **Qudus Sarumi (PhD candidate),** *University of Tennessee*
Mentorship in field techniques, experimental design, data visualization and interpretation
*Coauthorship on 1 paper in coauthor revision

2024 Jan-Aug* **Blessing Abiodun (PhD candidate),** *University of Tennessee*
Mentorship in field techniques, experimental design, data visualization and interpretation
*Coauthorship on 1 paper in coauthor revision

2023-2024* **Katelyn Houghton (PhD candidate),** *University of Tennessee*
Mentorship in field techniques, experimental design, metagenomics, manuscript drafting
*Coauthorship on 3 papers (2 published, 1 in coauthor revision)

2022-2024* **Alexander Truchon (PhD candidate),** *University of Tennessee*
Mentorship in field techniques, experimental design, *in vitro* culture transcriptomics, comparative environmental metagenomics, manuscript drafting
*Coauthorship on 4 papers (3 published, 1 in coauthor revision)

2022-2024* **Julia Obuya (Msc. – PhD student),** *Kenya Marine and Fisheries Research Institute*
Mentorship in experimental design, bioinformatics, publishing and peer review process
*Coauthorship on 4 papers (3 published, 1 in prep)

2020-2024* **David Niknejad, (undergraduate researcher-Msc. student),** *University of Tennessee*
Mentorship in diatom culturing, pH assays, field experiments, bioinformatics, publishing
Coauthorship on 2 papers (1 published, 1 in coauthor revision)

GRANT WRITING SUPERVISORY ROLES / MENTEES

2023 **Garrett Sharpe (Postdoctoral Researcher),** *North Carolina State University*
Mentorship in constructing an NSF Ocean Sciences Postdoctoral Research Fellowship proposal *via* zoom meetings, proposal edits/revisions and recommendations. **AWARDED.**

2020 **University-wide internal review panelist for NSF GRFP,** *University of Tennessee*
Reviewed NSF GRFP proposals, participated in panel and subsequent 3 hr info session

Mentorship of students with NSF Graduate Research Fellowship Program proposals
-Mentorship *via* revisions, recommendations and/or meetings *via* zoom/in person

2024 Madison Moreland (Undergraduate student), *University of Pittsburgh*
2024 Madeline McHugh (PhD student), *University of Tennessee*
2023 Meaghan Adler (PhD student), *University of Tennessee*
2023 Kennedi Hambrick (PhD student), *University of Tennessee*
2022 Adrianna Matthews (PhD student), *University of Tennessee*
2022 Kristen Holbrook (Undergraduate student), *University of Tennessee*
2022 Raegan Paul (Undergraduate student), *University of Tennessee*
2021 Diana Ramirez (PhD student), *University of Tennessee*
2021 Shelby Cagle (PhD student), *Colorado State University*

2020 Frank May (PhD student), *University of Tennessee*

SELECT RESEARCH / FIELD EXPEDITIONS

2025	HAB Cruise in Lake Victoria, Kenya (10 days), *RV Uvumbuzi*	*Chief Scientist, Dr. George Bullerjahn*
2024	ModMon Neuse-Pamlico, NC, USA (monthly), *RV 102*	*Lead Scientist, Dr. Hans Paerl*
2024	Albemarle sampling, NC, USA (monthly), personal vessel	Lead Scientist, **Dr. Brittany Zepernick**
2024	Mead's Quarry HAB survey, TN, USA (1 day)	*Lead Scientist, **Dr. Brittany Zepernick***
2023	DALLE Cruise – Lake Erie, USA (7 days), *RV Laurentian*	*Chief Scientist, Dr. Reagan Errera*
2022	NSF ASI Lake Victoria, Kenya, (20 days), *RV Uvumbuzi*	*Chief Scientist, Dr. George Bullerjahn*
2019	HAB pH cruise, Lake Erie, USA (7 days), *RV Gibraltar III*	*Lead Scientist, **Brittany Zepernick***
2016	CLASiC Cruise in Gulf of Mexico, USA (14 days), *RV Pelican*	*Chief Scientist, Dr. Jeffrey Krause*
2016	NSF REU - DOM effects in the Gulf of Mexico, USA (67 days)	*Lead Scientist, **Brittany Zepernick***

*Total days spent in the field: 119 days
*Total days offshore / at sea: 36 days

OUTREACH AND COMMUNITY SERVICE

2025	International Society of Limnology Wetzel Video Chapter Volunteer
2022-2024	Knox County algal bloom monitoring (Knox County, IJAMs board, TN Health Dept.)
2022-2024	Executive Board, Knoxville Tennessee Environmental Soil & Stream Testing K-TESST
2019-2024	Tennessee Valley Authority & Great Smoky Mountain Association volunteer
2019	Tennessee Valley Authority Annual Tennessee River Cleanup volunteer

RESEARCH IN THE PRESS AND MULTIMEDIA

2025 UT College of Arts & Sciences news article, Miller, A.B., Zepernick, B.N., Wilhelm, S.W. *Mead's Quarry Research Reveals Toxic Algae Drivers.*

2025 Researcher interview and cameo in Wetzel's Limnology digital chapters, International Society of Limnology. Chapter: The Nitrogen Cycle in Lakes & Rivers, invited by Dr. Warwick Vincent.

2025 ISME news piece on ISMEJ "Best Paper f the Year Award" article. **Zepernick, B.N.,** Wilhelm, S.W., McKay, R.M.L., *What does declining ice cover mean for winter algae?*

2024 Science communication piece featured in The Conversation
Wilhelm, S.W., **Zepernick, B.N.,** McKay, R.M.L., *Losing winter ice is changing the Great Lakes food web – here's how light is shaping life underwater*

2024 Newsweek article featured on MICR 669 course and findings
Tennessee lake gets health advisory after students find toxic pink algae

2024 WVLT8 Knoxville News article on MICR 669 course and findings
UT students break down the biology after toxic algae in Mead's Quarry

2024 Knoxville News Sentinel article featuring MICR 669 course and findings
Mead's Quarry has potential toxic pink algae bloom, Ijams Nature Center warns

2023 Invited science communication piece featured in FEMSmicroBlog for Earth Day
Zepernick, B.N., Wilhelm., *What does climate change mean for cold-adapted algae?*

PROFESSIONAL AND SOCIETY MEMBERSHIPS

2025 – current	International Symposium on Microbial Ecology (ISME) **Awarded 2-year Membership for Best Paper of the Year Award*
2024 – current	Association for the Sciences of Limnology & Oceanography (ASLO) **Early Career Scientist Annual Membership*
2024 – current	International Association of Great Lakes Research **Young Professional Annual Membership*
2024-current	American Society of Microbiology (ASM) **Postdoctoral Annual Membership*

ADDITIONAL CERTIFICATIONS

2014 – current PADI Open Water Diver Certified
2018 – current FlowCAM certified operator