

Stephen F. Jane

Institute for Global Change Biology/School for Environment and Sustainability
University of Michigan

440 Church Street, Ann Arbor, MI 48109-1041

Email: sfjane@umich.edu

Phone: (518)416-2879

Website: <https://stephenjane1.wixsite.com/stephenjane>

EDUCATION

- 2020 Ph.D.** Biology, Rensselaer Polytechnic Institute, Troy, NY
- Fulbright year at Uppsala University, Sweden (2019-2020)
 - Dissertation: "Feedbacks and Responses of Lake Ecosystems to Climatic Drivers"
- 2014 M.S.** Environmental Conservation-Wildlife, Fish and Conservation Biology, University of Massachusetts, Amherst, Massachusetts
- Thesis: "Effect of Distance from Source and Stream Flow on eDNA Signal Strength in Two Headwater Streams"
- 1993 B.A.** Environmental, Population, and Organismic Biology, University of Colorado, Boulder, Colorado

PUBLICATIONS (PEER-REVIEWED)

(‡ = Invited commentary)

Google Scholar Profile: <https://scholar.google.com/citations?user=WkGbhZgAAAAJ&hl=en>

- Zhou, Y., Wang, J., Zhou, L., Zhang, Y., Deng, J., Zhi, W., Zhang, Y., Qin, B., Wu, F., Woolway, R. I., **Jane, S. F.**, Rose, K. C., Jeppesen, E., Hamilton, D., Xenopoulos, M., & Leavitt, P. (2026). Widespread deoxygenation of freshwater ecosystems regularly reversed by nutrient management. *Nature Geoscience* <https://doi.org/10.1038/s41561-026-02024-y>
- Detmer, T. M., **Jane, S. F.**, McIntyre, P. B., & Kraft, C. E. (2026). Cold-water fisheries in a warmer world: Increasing temperature redistributes angling effort and concentrates activity in cold-water refugia. *Ambio* <https://doi.org/10.1007/s13280-026-02442-7>
- Shi, K., Woolway, R. I., Guan, Q., Zhang, W., Mi, C., Zhang, Y., Zhi, W., Wang, J., Xu, H., Zhou, Y., Hu, L., Kong, X., Luo, Y., Zhu, S., Leavitt, P. R., Bogard, M. J., **Jane, S. F.**, Fleischmann, A., Jansen, J., Li, L., Wang, S., Liu, Y., Ladwig, R., Wang, X., Huang, C., Jeppesen, E., Chen, P., & Qin, B. (2026). Deoxygenation in inland freshwater systems. *Nature Reviews Earth and Environment* <https://doi.org/10.1038/s43017-026-00795-x>
- Menicali, L., Bolster, D., Richter, D. H., **Jane, S. F.**, Jones, S., & Castruccio, S. (2026). A spatiotemporal physics-motivated state-space model of lake temperature profiles. *Environmental Science and Technology* **60**, 15089-15100.
- **Jane, S. F.**, Detmer, T. M., Eagles-Smith, C. A., Jirka, K. J., Olson, C. I., Randall, E. A., Driscoll, C. T., & McIntyre, P. B. (2026). Climate-associated oxythermal squeezes elevate mercury in a lacustrine food fish. *Environmental Science and Technology* **60**, 271-280.

- Woolway, R. I., Zhang, Y., Jennings, E., Zohary, T., **Jane, S. F.**, Jansen, J., Weyhenmeyer, G. A., Long, D., Fleischmann, A., Feng, L., Qin, B., Shi, K., Shi, H., Wang, W., Tong, Y., Zhang, G., Zscheischler, J., Ren, Z., & Jeppesen, E. (2025). Extreme and compound events in lakes. *Nature Reviews Earth & Environment* **6**, 593-611 (**S Jane co-led hypoxia section**).
- Woo, M. P., Detmer, T. M., Airey, M. E., **Jane, S. F.**, Sax, D. F., Dlugos, E., Menard, E. G., & McIntyre, P. B. (2025). Comparing influences of natural and artificial woody habitat on benthic macroinvertebrates in a north temperate lake. *Hydrobiologia* **852**, 701-717.
- Zhou, Y., Wang, J., Zhou, L., Zhi, W., Zhang, Y., Qin, B., Wu, F., Woolway, R. I., **Jane, S. F.**, Jeppesen, E., Hamilton, D., Xenopoulos, M., Spencer, R., Battin, T., & Leavitt, P. (2025). Episodic flooding causes sudden deoxygenation shocks in human-dominated rivers. *Nature Communications* **16**, 6865.
- Olson, C., **Jane, S. F.**, Geyman, B., Montesdeoca, M., McHale, P., Beier, C., Mills, J., McIntyre, P., Sunderland, E., & Driscoll, C. (2025). Soil mercury accumulation delays fish recovery from atmospheric deposition declines. *Environmental Science and Technology* **59**, 12656-12666.
- **Jane, S. F.**, Heilpern, S. A., Brenna, J. T., Detmer, T. M., Driscoll, C. T., Eagles-Smith, C. A., Giri, S., Glahn, R. P., Jirka, K. J., Kim, J., Montesdeoca, M. R., Olson, C. I., Park, H. G., Randall, E. A., & McIntyre, P. B. (2025). Climate-driven deoxygenation of lakes alters the nutrient-toxin profile of a food fish. *Environmental Science and Technology* **59**, 9486-9496.
- Ferrer, E. M., Pezner, A. K., Eddebbar, Y. A., Breitburg, D., Crowe, S., Garçon, V., Grégoire, M., **Jane, S. F.**, Leavitt, P. R., Levin, L., Rose, K., & Wallace, D. (2025). Why aquatic deoxygenation belongs in the planetary boundary framework. *PLOS Climate* **4**, e0000619.
- Rose, K. C., Ferrer, E. M., Carpenter, S. R., Crowe, S. A., Donelan, S. C., Garçon, V. C., Grégoire, M., **Jane, S. F.**, Leavitt, P. R., Levin, L. A., Oschlies, A., & Breitburg, D. (2024). Aquatic deoxygenation as a planetary boundary and key regulator of Earth system stability. *Nature Ecology and Evolution* **8**, 1400-1406.
- **Jane, S. F.**, Johnson, R. K., Rose, K. C., Eklöv, P., & Weyhenmeyer, G. A. (2024). Responses by benthic invertebrate community composition to dissolved organic matter in lakes decline substantially above a threshold concentration. *Freshwater Biology* **69**, 288-299.
- **Jane, S. F.**, Detmer, T. M., Larrick, S., Rose, K. C., Randall, E. A., Jirka, K. J., & McIntyre, P. B. (2024). Concurrent warming and browning eliminate cold-water fish habitat in many temperate lakes. *Proceedings of the National Academy of Sciences* **121**, e2306906120
- Lewis, A. S. L., Lau, M. P., **Jane, S. F.**, Rose, K. C., Be'eri-Shlevin, Y., Burnet, S. H., Clayer, F., Feuchtmayr, H., Grossart, H-P., et al. (2024). Anoxia begets anoxia: a positive feedback to the deoxygenation of temperate lakes. *Global Change Biology* **30**, e17046.
- **Jane, S. F.**, Mincer, J. L., Lau, M. P., Lewis, A. S. L., Stetler, J. T., & Rose, K. C. (2023). Longer duration of seasonal stratification contributes to widespread increases in lake hypoxia and anoxia. *Global Change Biology* **29**, 1009-1023.
- **Jane, S. F.**, Smith, K. M., Baker, D., Saroni, A., Cutler, E., & Carvalho, P. (2022). News media and fisheries-independent data reveal hidden impacts of hurricanes. *Ambio* **51**, 2169-2181.

- **†Jane, S. F.**, & Rose, K. C. (2021). Predicting arctic-alpine lake dissolved oxygen responses to future tree line advance at the Swedish forest-tundra transition zone. *Global Change Biology* **27**, 4207-4209.
- **Jane, S. F.**, Hansen, G. J. A., Kraemer, B. M., Leavitt, P. R., Mincer, J. L., North, R. L., Pilla, R. M., Stetler, J. T., Williamson, C. E., et al. (2021). Widespread deoxygenation of temperate lakes. *Nature* **594**, 66-70.
- **Jane, S. F.**, & Rose, K. C. (2018). Carbon quality regulates the temperature dependence of aquatic ecosystem metabolism. *Freshwater Biology* **63**, 1407-1419.
- **Jane, S. F.**, Winslow, L. A., Remucal, C. K., & Rose, K. C. (2017). Long-term trends and synchrony in dissolved organic matter characteristics in Wisconsin, USA lakes: quality, not quantity, is highly sensitive to climate. *JGR Biogeosciences* **122**, 546-561.
- Wilcox, T. M., McKelvey, K. S., Young, M. K., Sepulveda, A. J., Shepard, B. B., **Jane, S. F.**, Whiteley, A. R., Lowe, W. H., & Schwartz, M. K. (2016). Understanding environmental DNA detection probabilities: A case study using a stream-dwelling char *Salvelinus fontinalis*. *Biological Conservation* **194**, 209-216.
- **Jane, S. F.**, Wilcox, T. M., McKelvey, K. S., Young, M. K., Schwartz, M. K., Lowe, W. H., Letcher, B. H., & Whiteley, A. R. (2015). Distance, flow, and PCR inhibition: eDNA dynamics in two headwater streams. *Molecular Ecology Resources* **15**, 216-227.
- **Jane, S. F.**, Nislow, K. H., & Whiteley, A. R. (2014). The use (and misuse) of archaeological salmon data to infer historical abundance in North America with a focus on New England. *Reviews in Fish Biology and Fisheries* **24**, 943-954.
- Wilcox, T. M., McKelvey, K. S., Young, M. K., **Jane, S. F.**, Lowe, W. H., Whiteley, A. R., & Schwartz, M. K. (2013). Robust detection of rare species using environmental DNA: The importance of primer specificity. *PloS One* **8(3)**, e59520.
- Sompayrac, L., **Jane, S. F.**, Burn, T., Tenen, D. G., & Danna, K. J. (1995). Overcoming limitations of the mRNA differential display technique. *Nucleic Acids Research* **23**, 4738-4739.
- Sompayrac, L., **Jane, S. F.**, & Danna, K. J. (1996). Reduced levels of the $\alpha 1(\text{XI})$ procollagen mRNA in SV40-transformed cells. *Virology* **218**, 412-416.
- Sompayrac, L., **Jane, S. F.**, Lorper, M., & Sies, H. (1998). A 47-amino-acid fragment of SV40 T antigen represses transcription from human GSTa promoters. *Virology* **249**, 275-285.

PUBLICATIONS (UNDER REVIEW/IN PRESS)

- **Jane, S. F.**, Solomon, C. T., & Jones, S. E. (In Review). Deep-water oxygen supersaturation as a predictor of deoxygenation resistance in lakes. *Environmental Science and Technology*

PUBLICATIONS (OTHER)

- **Jane, S. F.** (2021). Building an international research team to understand lake dissolved

oxygen. Springer Nature Sustainability Community. Available at: <https://sustainabilitycommunity.springernature.com/posts/building-an-international-research-team-to-understand-lake-dissolved-oxygen>

- **Jane, S. F.** (2021). Building an international research team to understand lake dissolved oxygen. BLOG.GLEON. Available at: <https://blog.gleon.org/building-an-international-research-team-to-understand-lake-dissolved-oxygen>
- **Jane, S. F.,** Roy, A. H., Hazelton, P. D., Richards, T. A., Finn, J. T., & Randhir, T. O. (2016). Establishing links between stream flow and ecological integrity in the Sudbury River (Northeastern U.S.). U.S. Fish and Wildlife Service Cooperator Science Series #122-2016.

GRANTS & FELLOWSHIPS

- **IGCB-JTS Synthesis Science Working Group**, “Advancing oxythermal habitat modeling with AI to predict impacts to central US fish species richness under climate change”. Award total \$48,203 (beginning May 2026). **S Jane conceived, wrote, and submitted the proposal.** Also funded for a postdoc at IGCB to conduct the work. Total funding: \$172,203 (Beginning June 2026)
- **Notre Dame Strategic Framework Grant co-PI**, “Creating the capacity to predict future water quality with physics-informed artificial intelligence”. Award total \$199,800 (Spring 2024).
- **Society of Science Postdoctoral Fellow** at the University of Notre Dame. Awarded two years of support for living and research expenses totaling \$134,000 (Beginning January 2024).
- **Cornell Atkinson Postdoctoral Fellow** at the Cornell Atkinson Center for Sustainability. Awarded two years support for living and research expenses totaling \$150,000 (Beginning June 2021).
- **Fulbright Fellow** PhD research year at Uppsala University, Sweden. Awarded support for living expenses for one academic year totaling approximately \$12,800. Selected as one of three Swedish Fulbrighters to attend the February 2020 Fulbright Seminar on the European Union and NATO, Brussels, Belgium (2019 – 2020).
- **SESYNC Graduate Research Fellow** Grant proposal resulting from graduate student workshop was funded by the National Socio-Environmental Synthesis Center (SESYNC). This funding supported travel and lodging to SESYNC in Annapolis, MD in support of a team research project extending from summer 2017 through spring of 2019. Estimated \$5,500.
- Awarded travel grant to attend the National Socio-Environmental Synthesis Center (SESYNC) graduate student workshop on socio-environmental synthesis, March 7-10, 2017 in Annapolis, MD.
- Awarded travel grants through Cary Institute of Ecosystem Studies to attend GLEON 18 (Gaming, Austria), GLEON 19 (Mohonk Lake, NY), and GLEON 20 (Rottnest Island, Australia). Total awards ~ \$5,500.
- Grant from the *Richard Cronin Fisheries Research Fund* in recognition of outstanding

achievement in the Department of Environmental Conservation – University of Massachusetts (\$2,000).

HONORS

- Selected by faculty to be graduate student speaker at Rensselaer Polytechnic Institute commencement ceremonies May 2021.
- *Cornell Chronicle* Most-visited research article of the year (2024): Feature covering lead-author publication on the impact of concurrent lake browning and warming on cold-water fish habitat.

PRESENTATIONS

(† = Invited presentation, * = Mentored student):

- 2026 **S. F. Jane**, T. M. Detmer, C. A. Eagles-Smith, C. I. Olson, E. A. Randall, C. T. Driscoll, and P. B. McIntyre. Anoxia-associated oxythermal habitat compression elevates mercury in a cold-water lake fish. Ecological Society of America. Salt Lake City, UT, USA.
- 2026 †**S. F. Jane**. Reflections on rapid change in deoxygenating lakes. Department of Biology Spring Seminar Series, Baylor University, Waco, TX.
- 2025 †**S. F. Jane**. Will ongoing lake deoxygenation alter the nutrient-toxin profile of a food fish? Great Lakes Consortium for Fish Consumption Advisories.
- 2025 **S. F. Jane** and S. E. Jones. Prevalence and drivers of oxygen supersaturation in deep waters of global lakes. Association for the Sciences of Limnology and Oceanography. Charlotte, NC, USA.
- 2025 †**S. F. Jane**. Reflections on rapid change in deoxygenating lakes. Department of Fish, Wildlife, and Conservation Biology Seminar, Colorado State University, Fort Collins, CO.
- 2024 **S. F. Jane**, T. M. Detmer, S. Larrick, K. C. Rose, E. A. Randall, K. J. Jirka, and P. B. McIntyre. Lake browning exacerbates loss of cold-water fish habitat associated with warming. Association for the Sciences of Limnology and Oceanography summer meeting, Madison, WI, USA.
- 2024 †**S. F. Jane**. Ripple effects of warming induced lake deoxygenation. Energy and Water Resources Seminar Spring 2024, Cornell University, Ithaca, NY.
- 2023 †**S. F. Jane**. Ripple effects of dissolved oxygen depletion in temperate lakes under climate change. Northeast Climate Adaptation Science Center webinar series.
- 2023 **S. F. Jane**, S. A. Heilpern, J. T. Brenna, T. M. Detmer, C. T. Driscoll, C. A. Eagles-Smith, S. Giri, R. P. Glahn, K. J. Jirka, J. G. Kim, M. Montesdeoca, C. I. Olson, H. G. Park, E. A. Randall, and P. B. McIntyre. Climate change elevates risk of lake fish consumption via opposing influences on selenium and mercury. American Geophysical Union fall meeting. San Francisco, CA.

- 2023 **S. F. Jane.** Ripple effects of warming-induced lake deoxygenation from Adirondack brook trout habitat to the dinner table. Cornell Department of Natural Resources and the Environment Seminar Series Fall 2023. Ithaca, NY.
- 2023 **†S. F. Jane,** C. A. Eagles-Smith, K. C. Rose, K. Jirka, E. Randall, C. T. Driscoll, and P. B. McIntyre. Will climate warming enhance mercury bioaccumulation in lake fishes by inducing deep-water anoxia? U. S. Environmental Protection Agency Federal-State Toxicology Risk Analysis Committee (FSTRAC). Virtual Meeting.
- 2023 **†S. F. Jane.** Dissolved oxygen in warming lakes. Midwest Glacial Lakes Partnership – Lake Conservation Webinar Series. Virtual.
- 2023 **S. F. Jane,** C. A. Eagles-Smith, K. C. Rose, K. Jirka, E. Randall, C. T. Driscoll, and P. B. McIntyre. Will climate warming enhance mercury bioaccumulation in lake fishes by inducing deep-water anoxia? U. S. Environmental Protection Agency 2023 National Fish Forum. Virtual Meeting.
- 2022 **S. F. Jane,** C. A. Eagles-Smith, K. C. Rose, K. Jirka, E. Randall, C. T. Driscoll, and P. B. McIntyre. Will climate warming enhance mercury bioaccumulation in lake fishes by inducing deep-water anoxia? International Conference on Mercury as a Global Pollutant. Virtual Meeting (on-demand presentation).
- 2022 **S. F. Jane,** K. C. Rose, T. Detmer, and P. B. McIntyre. Drivers and consequences of long-term declines in deep-water dissolved oxygen in lakes. Joint Aquatic Sciences Meeting. Grand Rapids, MI.
- 2021 **†S. F. Jane,** K. C. Rose, and Many contributors. New York to Austria to Sweden to Covid: The long and winding road to dissolved oxygen in warming lakes. Limnology Seminar Series – Department of Ecology and Genetics, Uppsala University, Sweden.
- 2021 **S. F. Jane,** K. C. Rose, and many contributors. Changing lake dissolved oxygen: Adirondack lakes in the context of temperate zone trends. Adirondack Research Forum. Virtual Meeting.
- 2019 **S. F. Jane,** K. C. Rose, and many contributors. Long-term declines in epilimnetic and hypolimnetic dissolved oxygen across a global suite of lakes. Uppsala University Limnology Department Seminar. Uppsala, Sweden.
- 2019 **†S. F. Jane,** K. C. Rose, and many contributors. Long-term declines in epilimnetic and hypolimnetic dissolved oxygen across a global suite of lakes. Invited presentation. SUNY Oneonta Biology Department Seminar Series. Oneonta, NY.
- 2019 **†S. F. Jane,** K. C. Rose, and many contributors. Long-term declines in epilimnetic and hypolimnetic dissolved oxygen across a global suite of lakes. Invited presentation. USGS Water Science Center. Troy, NY.
- 2018 **S. F. Jane,** K. C. Rose, and many contributors. *Long-term and broad scale declines in dissolved oxygen observed in both epilimnetic and hypolimnetic waters across ~400 globally distributed lakes. Global Lake Ecological Observatory Network 20 All Hands' Meeting, Rottnest Island, Australia.*
- 2018 **S. F. Jane,** L. A. Winslow, T. H. Leach, and K. C. Rose. Long-term trends in dissolved oxygen across a global suite of lakes. Association for the Sciences of Limnology and

Oceanography summer meeting, Victoria, British Columbia, Canada.

- 2017 **S. F. Jane** and K. C. Rose. *Climate warming and increasing DOC: potential interactive effects on ecosystem respiration. Global Lake Ecological Observatory Network 19 All Hands' Meeting, Mohonk Lake, NY.*
- 2017 *N. Grinspan, **S. F. Jane**, and K. C. Rose. *Effect of salt concentration on dissolved organic carbon release from soil.* ** Rensselaer Research Experience for High School Students 2017, Troy, NY.
- 2016 **S. F. Jane**, L. A. Winslow, and K. C. Rose. *Long-term trends in dissolved organic carbon characteristics in Wisconsin, USA lakes. Global Lake Ecological Observatory Network 18 All Hands' Meeting, Gaming, Austria.*
- 2016 **S. F. Jane**, L. A. Winslow, and K. C. Rose. Long-term trends in dissolved organic carbon characteristics of Wisconsin lakes. Association for the Sciences of Limnology and Oceanography summer meeting, Santa Fe, NM.
- 2016 **S. F. Jane**, L. A. Winslow, and K. C. Rose. Long-term trends in dissolved organic carbon characteristics of Wisconsin lakes. Rensselaer Polytechnic Institute Graduate Research Symposium, Troy, NY.
- 2015 A. Roy, **S. Jane**, J. Finn, P. Hazelton, T. Randhir, and T. Richards. Linkages between stream flow, habitat, and biotic assemblages in an urbanized large river. Society for Freshwater Science annual meeting, Milwaukee, WI.
- 2015 **S. F. Jane**, J. T. Finn, T. O. Randhir, and A. H. Roy. Linkages between streamflow, habitat, and biotic integrity in the urbanized Sudbury River. New England Association of Environmental Biologists conference, Bartlett, NH.
- 2014 T. M. Wilcox, K. S. McKelvey, K. Y. Young, **S. F. Jane**, W. H. Lowe, A. R. Whiteley, and M. K. Schwartz. Environmental DNA for conservation biology. North American Congress for Conservation Biology, Missoula, MT.
- 2013 **S. F. Jane**, T. Wilcox, K. S. McKelvey, M. K. Young, W. Lowe, and A. R. Whiteley. Effect of distance from source and stream flow on eDNA signal strength in two headwater streams. 143rd annual meeting of the American Fisheries Society, Little Rock, AR.

*Italics indicates poster, all other presentations are oral

RESEARCH APPOINTMENTS & EMPLOYMENT

Institute for Global Change Biology, University of Michigan, Ann Arbor, MI
Postdoctoral Research Fellow
June 2026 - current

Annis Water Resources Institute, Grand Valley State University, Muskegon, MI
Research Scientist
January 2026 – May 2026

University of Notre Dame, Notre Dame, IN
Society of Science Postdoctoral Fellow
January 2024 – December 2025

Cornell University, Ithaca, NY
Atkinson Postdoctoral Fellow
June 2021 – December 2023

Rensselaer Polytechnic Institute, Troy, NY
Postdoctoral Research Associate
January 2021 – May 2021

Rensselaer Polytechnic Institute, Troy, NY
PhD student – Biological Sciences
Advisor: Kevin Rose
August 2015 – December 2020

Massachusetts Cooperative Fish and Wildlife Research Unit – University of Massachusetts,
Amherst, MA – Research Technician, Supervisors – Dr. Stephen DeStefano, Dr. Allison Roy
September 1, 2014 – June 2015

University of Massachusetts at Amherst, Amherst, MA
Research Assistant -
Advisor: Andrew Whiteley
September 1, 2011 – May 2014

University of Massachusetts at Amherst, Amherst, MA
Technician – Conservation genetics lab
October 2, 2009 – August 31, 2011

US Geological Survey Conte Anadromous Fish Research Center, Turners Falls, MA
Intern, Supervisor, Dr. Benjamin Letcher
May 26, 2009 – August 31, 2009

REVIEWER FOR

Grant Proposals

Cornell Atkinson Center for Sustainability Graduate Research Grants, National Science Foundation Collaborative Research Proposal, Midwest Climate Adaptation Science Center

Journals

Transactions of the American Fisheries Society, Methods in Ecology and Evolution, Biological Conservation, Molecular Ecology Resources, Biogeochemistry, Science of the Total Environment, Water Resources Research, Marine and Freshwater Research, JGR Biogeosciences, Global Change Biology, Scientific Reports, Northeastern Naturalist, Earth Interactions, Limnology and Oceanography, Limnology and Oceanography Letters, Science Advances, Canadian Journal of Fisheries and Aquatic Sciences, Climatic Change

MENTORING EXPERIENCE

Riley Saxton 2025-2026 – Co-mentor (with Drs. Thomas Detmer and Peter McIntyre)
Undergraduate senior honors thesis. Cornell University.

Siena Larrick 2022-2023 – Co-advisor (with Dr. Thomas Detmer) Undergraduate honors thesis (*summa cum laude*). Cornell University, Environment & Sustainability Program.

Joshua Mincer 2018 & 2019– Mentor to Rensselaer undergraduate student conducting independent study research project. His work became part of the 2023 paper “Longer duration of seasonal stratification contributes to widespread increases in lake hypoxia and anoxia”.

Nicole Grinspan 2017 – Mentored high school student as part of the Rensselaer Research Experience for High School Students summer program. Guided student through a one-month research project culminating in a poster presentation. Student poster was one of four in the program recognized for excellence.

TEACHING EXPERIENCE & PEDAGOGICAL TRAINING

Co-Instructor of Record *Introduction to Biocomputing* (University of Notre Dame, FA24-BIOS-30318-CX-01) – Fall 2024. Presented introductory lecture material on R programming. Developed and presented new course material focusing on the concepts behind and implementation of linear regression in R.

Striving for Excellence in College and University Teaching (certification) – Kaneb Center for Teaching Excellence, University of Notre Dame. May 22, 2024.

Co-Instructor *Limpopo Resilience Lab Virtual R Workshop* - March 22-26, 2021. Assisted students who needed extra help and with troubleshooting of coding problems. Presented course material for one section of the course.

Teaching Assistant *Biostatistics* (Rensselaer Polytechnic Institute, Bio 4200) – Spring 2016, Spring 2019, Fall 2020, Grading responsibilities, regularly met with students outside of class time to assist those needing additional help.

Teaching Assistant *Introduction to Biology* (Rensselaer Polytechnic Institute, Bio 1010) – Fall 2015, Instructed lab section of course, including presentation of material, creating quiz questions, guiding students through lab exercises, and grading assignments and tests.

SERVICE

Climate Sentinels Working Group Moderator 2022-23 – Global Lake Ecological Observatory Network, Lake George, NY and virtual meeting.

Rensselaer First Year Experience 2017 & 2018 – Assisted with orientation activities for entering freshmen students.

MEDIA COVERAGE

2024 Interviewed for 'Climate Connections', a nationally syndicated radio show produced by Yale Center for Environmental Communication and broadcast on roughly 700 stations. Aired in May 2024.

2024 'Concurrent warming and browning eliminates cold-water fish habitat in many temperate lakes' covered in several media outlets including: Newsweek, North Country Public Radio, and NBC News 4 New York (New York City, New Jersey, Connecticut).

2023 'Longer duration of seasonal stratification contributes to widespread increases in lake hypoxia and anoxia' received international attention. Featured in Science for Environment Policy published by the European Commission's Environment Directorate-General and distributed to over 22,000 policymakers, academics, and businesspeople across Europe.

2021 'Widespread deoxygenation of temperate lakes' appeared in over 200 media outlets worldwide, including the AP, The Guardian, Popular Science, NPR, Wired Magazine, and The Washington Post. Listed at number 25 in CarbonBrief's list of climate papers most mentioned in the media in 2021.