George W. Kling, CV Summary (Full CV following)

Research Publications: (125+ total)

Highlighted (lead or corresponding author on 9 of the following):

Science 236:169	<i>Nature</i> 337:215	Nature Communications 8:772
Science 237:1022	<i>Nature</i> 348:201	PNAS 102:14185
Science 251:298	<i>Nature</i> 368:405	PNAS 110:3429
Science 265:1568	<i>Nature</i> 408:149	PNAS 115:3
Science 345:925	Nature 551:457	

External Awards:

- Fellow of the American Association for the Advancement of Science, 1997 .
- U. S. National Science Foundation Presidential Faculty Fellow, 1995 2000.
- U. S. National Academy of Sciences Young Investigator Award, 1993 1994.
- Republic of Cameroon, Presidential Medal for Service (disaster reduction), 2016.
- United Nations Sasakawa Award, Certificate of Merit for Disaster Reduction, Nyos-Monoun Degassing Program, (as Chair of Advisory Committee), 2001.
- Association for the Sciences of Limnology and Oceanography, John H. Martin Award, 2016.
- Association for the Sciences of Limnology and Oceanography, Ruth Patrick Award, 2007.

Grants:

- *Total*: 40 awards (34 NSF, plus EPA, NASA, USAID, Hewlett Foundation, National Geographic Society)
- Current: 4 NSF, 1 NASA
- Amount: \$53,370,000 total awarded; \$13,078,000 to Kling

Teaching and Mentoring:

- 10 separate courses taught (not including seminars)
- Chair of 10 Ph.D., 6 M.S.; Committee member of 30 Ph.D., 4 M.S., 6 Honors Theses
- 29 students supervised for undergraduate research (15 by NSF-REU funding)
- Grant funding from NSF and the Hewlett Foundation to develop an undergraduate curriculum development testbed, and for developing the first academic minor at U of M

Outreach (published or broadcast interviews about my research):

- 300+ articles (e.g., National Geographic, Smithsonian, Discover, GEO, World Book, Science News, NSF Frontiers, New York Times, BBC News, New Scientist, Economist)
- 13 articles in <u>Science</u> and <u>Nature</u>
- 8 television films (BBC, National Geographic, Discovery Channel, PBS, History Channel, Learning Channel, Weather Channel)
- 25 T.V. and radio broadcasts (ABC, NBC, CBS, CNN, NPR, BBC, etc.)
- Numerous engagements with members of Congress concerning legislation on energy policy, climate change, and the integrity and use of science in government

Service and Administration:

- Chair, International Advisory Group on the Nyos-Monoun Degassing Project, 1995 2016
- Associate Chair, Department of Ecology and Evolutionary Biology, University of Michigan, 2008 2011
- Vice Chair, Science Steering Committee, NSF Division of Polar Programs, SEARCH, 2018 -
- National Representative, International Society of Limnology (SIL), Elected 2007 2009
- Associate Editor for Limnology and Oceanography, 2001 2015
- Associate Editor for Arctic, Alpine, and Antarctic Research, 2019 -

CURRICULUM VITAE

updated September 2019

George W. Kling

Professor

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Education:

Ph.D., 1988. Duke University, Department of Zoology, Durham, NC. (D. A. Livingstone, major advisor, W. H. Schlesinger, minor advisor)

B.A., 1982. University of Colorado, Department of Environmental, Population, & Organismic Biology, Boulder, CO (W. M. Lewis, advisor)

Positions Held (since 1988):

Professor, 2003 to present, Department of Ecology and Evolutionary Biology, University of Michigan.

Associate Chair, 2008-2011, Department of Ecology and Evolutionary Biology, University of Michigan.

Associate Professor, 1997 to 2002, Department of Biology, University of Michigan.

Assistant Professor, 1991 to 1997, Department of Biology, University of Michigan.

Research Scientist, 1991 to 2002, Center for Great Lakes and Aquatic Sciences, University of Michigan.

Research Associate, 1990 to 1991, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA.

Postdoctoral Fellow, 1988 to 1990, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA (J. E. Hobbie, advisor).

Awards:

Fellow of the American Association for the Advancement of Science, 1997 - .

U. S. National Science Foundation Presidential Faculty Fellow, 1995 - 2000.

U. S. National Academy of Sciences Young Investigator Award, 1993 - 1994.

Association for the Sciences of Limnology and Oceanography, John H. Martin Award, 2016.

Association for the Sciences of Limnology and Oceanography, Ruth Patrick Award, 2007.

Republic of Cameroon, Presidential Medal for Service (disaster reduction), 2016.

United Nations Sasakawa Award, Certificate of Merit for Disaster Reduction, Nyos-Monoun Degassing Program, (as Chair of Advisory Committee), 2001.

The Geochemical Journal Award, Most Outstanding Paper, 2009.

University of Michigan, Robert G. Wetzel Collegiate Chair, 2009 - 2019.

University of Michigan Distinguished Faculty, 2005 - .

University of Michigan Faculty Recognition Award, 1999.

University of Michigan Excellence in Research Award, 1997.

Grants:

Current:

- NSF DEB 1754835. "Collaborative Research Coupled biological and photochemical degradation of dissolved organic carbon in the Arctic "; Co-PI with B. Crump, R. Cory, \$1.101 million (\$321K to Kling), 2018-2021.
- NSF DEB 1637459. "Arctic LTER: Climate Change and Changing Disturbance Regimes in Arctic Landscapes"; Co-PI with E. Rastetter et al., \$6.762 million (\$1.004M to Kling), 2017-2022.
- NSF ARC 1504006. "Carbon, Water, and Energy Balance of the Arctic Landscape at Flagship Observatories in Alaska and Siberia"; Co-PI with D. Bret-Harte, E. Rastetter, (\$79K to Kling), 2015-2019.
- NSF OCE 1736629. "The role of heterotrophic bacteria in protecting cyanobacteria from hydrogen peroxide in coastal ecosystems"; Co-PI with G. Dick, R. Cory, \$876K, 2018-2020.
- NASA 17-THP17-0018, UTA18-000984. "Advancing InSAR Technology for Monitoring and Prediction of the Hydrologic State of Permafrost Terrain in the Arctic"; Co-PI with A. Chen and B. Cardenas, \$518K (\$130K to Kling), 2018-2020.

Past:

- NSF DEB 1147378. "LTREB Renewal: Collaborative research: What controls long-term changes in freshwater microbial community composition? PI, collaborative research with B. Crump, \$450K (\$185K to Kling), 2012-2018.
- NSF DEB 1026843. "Arctic LTER: The Role of Biogeochemical and Community Openness in Governing Ecological Change in Arctic Ecosystems"; Co-PI with G. Shaver et al., \$5.88 million (\$958K to Kling), 2011-2018.
- NSF OPP 1023270. "Collaborative Research: Turning on the lights Photochemical and microbial processing of newly exposed carbon in arctic ecosystems"; Co-PI with R. M. Cory, \$536K (\$287K to Kling), 2010-2015.
- NSF OPP 1107593. "Collaborative Research on Carbon, Water, and Energy Balance of the Arctic Landscape at Flagship Observatories in Alaska and Siberia"; Co-PI with G. Shaver et al., \$1.117 million (\$363K to Kling, OPP 1107707), 2011-2015.
- NSF OPP 0806394. "Collaborative Research: Spatial and Temporal Influences of Thermokarst Failures on Surface Processes in Arctic Landscapes"; Co-PI with W. B. Bowden et al., \$1.073 million (\$335K to Kling), 2008-2014.
- NSF DEB 0639805. "LTREB: What controls long-term changes in freshwater microbial community composition? PI, collaborative research with B. Crump, \$450K (\$183K to Kling), 2006-2012.
- NSF DEB 0423385. "The Arctic LTER Project: Regional Variation in Ecosystem Processes and Landscape Linkages"; Co-PI with J. Hobbie et al., \$4.92 million (\$837K to Kling), 2004-2010.
- EPA FP-91686801. "EPA STAR Fellowship", awarded to Heather Adams (Ph.D. candidate), G. Kling advisor, (\$37K), 2007-2010.
- NSF ATM 0221835. "Biocomplexity Land-Water Interaction at the Catchment Scale: Linking Biogeochemistry and Hydrology"; Co-PI with M. Stieglitz, K. Griffin, J. Hobbie, J. Schimel, E. Rastetter, \$1.41 million (\$417K to Kling), 2002-2008.
- NSF DEB 0508570. "Dissertation Research: The effects of mixing and storm events on lake phytoplankton production". PI with M. A. Evans, \$12K, 2005-2007.

- NSF OPP 9911681. "Developing process-level understanding of controls on belowground carbon and nutrient dynamics in tundra ecosystems"; Lead PI with K. Nadelhoffer, L. Johnson, E. Rastetter, M. Sommerkorn, \$2.07 million, 2000-2007.
- NSF OPP 9911278. "Aquatic ecosystem responses to changes in the environment of an Arctic drainage basin"; co-PI with J. Hobbie et al., \$4 million (\$250K to Kling), 2000-2005.
- NSF OPP 9911278-suppl. "Aquatic ecosystem responses to changes in the environment of an Arctic drainage basin"; co-PI with J. Hobbie et al., \$500K (\$87K to Kling), 2005-2006.
- NSF DEB 9810222. "The Arctic LTER Project: The Future Characteristics of Arctic Communities, Ecosystems, and Landscapes"; Co-PI with J. Hobbie et al., \$4.2 million (\$476K to Kling), 1998-2004.
- USAID, Office of Foreign Disaster Assistance (OFDA) AOTA-00-99-00223-00. "Mitigation of volcanic hazards: Degassing Lakes Nyos and Monoun"; lead PI, with W. Evans et al., \$685K, 1999-2004.
- Hewlett Foundation. "An interdisciplinary minor in Global Change at the University of Michigan"; co-PI with B. van der Pluijm, D. Allan, E. Dey, \$300K (w/U-M match), 2000-2004.
- NSF DEB 9553064. "PFF Environmental Biogeochemistry"; PI, \$500K, 1995-2000.
- NSF OPP 9615949. "Key connections in Arctic aquatic landscapes"; co-PI with J. Hobbie et al., \$2.9 million (\$175K to Kling), 1997-2001.
- NSF/(EPA) EAR 9524454. "Carbon Exchange Dynamics in a Temperate Forested Watershed"; co-PI with L. Walter, P. Meyers, D. R. Zak, L. Abriola, \$800K, 1995-2000.
- NSF 961565. "Development, Deployment, and Evaluation of an Interdisciplinary Undergraduate Curriculum Development Testbed (UCDT)"; co-PI with T. Killeen et al., \$200K, 1996-2000.
- NSF OPP 9615986. "Effects of Climate-Landscape Interactions on Carbon Storage in Arctic Alaska"; PI; collaborative research with L. Brubaker & F. S. Hu, \$302K (\$75K to Kling), 1996-2000.
- NSF OPP 9622157. "Development of a linked hydro-biogeochemical model for an arctic watershed"; co-PI with A. Giblin, M. Stieglitz, J. Hobbie, \$115K, 1996-1999.
- NSF OPP 9615942. "Belowground carbon sources and sinks in arctic tundra ecosystems"; co-PI with K. Nadelhoffer, L. Johnson, W. Reeburgh, \$402K (\$45K to Kling), 1996-1999.
- NSF DEB 9318085. "Structure and Function of a Tropical Ecosystem"; Lead PI, with A. Giblin, R. Hecky, J. Kitchell, P. Reinthal, \$600K, 1994-1999.
- NSF DEB 9211775-SPPL. "Carbon Dynamics in Aquatic Ecosystems: LTER Multi-Site Comparison"; Lead PI, with J. Cole and T. Kratz, \$60K, 1994-1998.
- NSF Arctic Systems Science, LAII OPP 9318529. "CO₂ and CH₄ Fluxes by Ecosystem Type; Long-Term Feedback Relationships with the Atmosphere"; Co-PI with J. Hobbie et al., \$125K (\$80K to Kling), 1994-1998.
- NSF DEB 9211775. "The Arctic LTER: Terrestrial and Freshwater Research"; Co-PI with J. Hobbie et al., \$3.9 million (\$125K to Kling), 1992-1998.
- NSF DEB 9317698. "Causes and consequences of highly variable CO₂ in aquatic ecosystems"; Co-PI with N. Caraco and J. Cole, \$450K (\$30K to Kling), 1994-1997.
- NSF OPP 9400722. "Controls of Structure and Function of Aquatic Ecosystems in the Arctic"; Co-PI with J. Hobbie et al., \$2.65 million (\$100K to Kling), 1994-1996.
- NSF DPP 9024188. "Arctic Ecosystems"; Co-PI with J. Hobbie et al., \$2.25 million (\$150K to Kling), 1991-1994.
- NSF Arctic Systems Science, DPP 9214961. "Attaining Ecological Understanding at the Regional Level"; Co-PI with J. Hobbie et al., \$85K, 1992.

- U.S. Agency for International Development, AID-CAM-92-078. "Degassing Lakes Nyos and Monoun"; PI, \$7.1K, 1992.
- National Geographic Society, NGS 4190-89. "Tropical Limnology"; PI, \$30K, 1989-1990.
- NSF EAR 8709978. "Limnology in Cameroon"; PI, \$7K, 1987-1988.
- NSF BSR 8612850. "Limnology and paleolimnology in Madagascar"; PI (dissertation research w/D. A. Livingstone), \$8.7K, 1986-1987.

Publications: (PDFs at https://scholar.google.com/citations?hl=en&user=CIfyNMgAAAAJ)

In Review or Revision

- Chen, J., Y. Wu, M. O;pConnor, M. B. Cardenas, K. Schaefer, R. Michaelides, G. W. Kling. *In Review*. InSAR reveals factors affecting active layer freeze-thaw and water storage patterns above continuous permafrost in the North Slope of Alaska. **Remote Sensing of the Environment.**
- Nalven, S. G., C. P. Ward, R. M. Cory, G. W. Kling, T. J. Sharpton, C. M. Sullivan, and B. C. Crump. *In Revision*. Experimental metatranscriptomics reveals the costs and benefits of dissolved organic matter photo-alteration for freshwater microbes. **The ISME Journal**.
- Eugster, W., J. Laundre, J. Eugster, and G. W. Kling. *In Review*. Long-term reliability of the Figaro TGS 2600 solid-state methane sensor under low Arctic conditions at Toolik lake, Alaska. **Aerosol and Air Quality Research.**

Published or In Press (all peer-reviewed)

- O'Connor, M. T., Cardenas, M. B., Neilson, B. T., Nicholaides, K. D., and G. W. Kling. 2019. Active layer groundwater flow: The interrelated effects of stratigraphy, thaw, and topography. **Water Resources Research** 55. https://doi.org/10.1029/2018WR024636
- Moon, T. A., I. Overeem, M. Druckenmiller, M. Holland, H. Huntington, G. W. Kling, A. L. Lovecraft, G. Miller, T. Scambos, C. Schädel, E. A. G. Schuur, E. Trochim, F. Wiese, D. Williams, G. Wong. *In Press*. The expanding footprint of rapid Arctic change. **Earth's Future** 7 (3), 212-218.
- Trusiak, A., L. A. Treibergs, G. W. Kling, and R. M. Cory. 2019. The controls of iron and oxygen on hydroxyl radical (•OH) production in soils. **Soil Systems** 3, 1, 1-23; doi:10.3390/soilsystems3010001
- Neilson, B. T., M. B. Cardenas, M. T. O'Connor, M. T. Rasmussen, T. V. King, G. W. Kling. 2018. Groundwater Flow and Exchange Across the Land Surface Explain Carbon Export Patterns in Continuous Permafrost Watersheds. **Geophysical Research Letters** 45(15):7596-7605. *doi:* 10.1029/2018GL078140
- Liu, X., K. Koba, L.A. Koyama, S.E. Hobbie, M.S. Weiss, Y. Inagaki, G.R. Shaver, A.E. Giblin, S. Hobara, K.J. Nadelhoffer, M. Sommerkorn, E.B. Rastetter, G.W. Kling, J.A. Laundre, Y. Yano, A. Makabe, M. Yano, C. Liu. 2018. Nitrate is an important nitrogen source for arctic plants. **Proc. National Academy of Sciences** 115:3398-3403. doi.org/10.1073/pnas.1715382115
- Trusiak, A., L. A. Treibergs, G. W. Kling, and R. M. Cory. 2018. The role of iron and reactive oxygen species in the production of CO₂ in arctic soil waters. **Geochimica et Cosmochimica Acta** 224: 80–95. doi.org/10.1016/j.gca.2017.12.022

- Cory, R. M. and G. W. Kling. 2018. Controls on DOM degradation along the aquatic continuum: the influence of interactions between light, chemistry, and biology. **Limnology and Oceanography Letters** 3(3):102-116. *doi:* 10.1002/lol2.10060
- Thompson, L.R., J.G. Sanders, D. McDonald, et al. and The Earth Microbiome Project Consortium. 2017. A communal catalogue reveals Earth's multiscale microbial diversity. **Nature** 551:457 *doi:10.1038/nature24621*
- Ward, C. P., S. G. Nalven, B. C. Crump, G. W. Kling, R. M. Cory. 2017. Photochemical alteration of dissolved organic carbon in permafrost soils shifts microbial metabolic pathways and stimulates respiration. **Nature Communications** 8:772 *doi* 10.1038/s41467-017-00759-2
- Hobbie, J. E., G. R. Shaver, E. R. Rastetter, J. E. Cherry, S. J. Goetz, K. C. Guay, W. A. Gould, and G. W. Kling. 2017. Multiple ecosystem responses to climate change at a Low Arctic and a High Arctic long-term research site. **Ambio** 46: S160–S173, *doi:* 10.1007/s13280-016-0870-x.
- Berry, M. A., R. M. Cory, T. W. Davis, M. B. Duhaime, D. Gossiaux, T. H. Johengen, G. W. Kling, J. A. Marino, P. Den Uyl, G. J. Dick, V. J. Denef. 2016. Cyanobacterial harmful algal blooms are a biological disturbance to western Lake Erie bacterial communities. **Environmental Microbiology.** doi:10.1111/1462-2920.13640
- Gough, L. N. D. Bettez, K. A. Slavik, W. B. Bowden, A. E. Giblin, G. W. Kling, J. A. Laundre, and G. R. Shaver. 2016. Effects of Long-Term Nutrient Additions on Arctic Tundra, Stream, and Lake Ecosystems: Beyond NPP. **Oecologia**, *doi: 10.1007/s00442-016-3716-0*
- Chipman, M., G. W. Kling, C. C. Lundstrom, and F. S. Hu. 2016. Multiple thermo-erosional episodes during the past six millennia: Implications for the response of Arctic permafrost to climate change. **Geology** 44: 439–442, *doi:10.1130/G37693.1*.
- Cory, R. M., T. W. Davis, G. J. Dick, T. Johengen, V. J. Denef, M. Berry, S. E. Page, S. B. Watson, K. Yuhas, G. W. Kling. 2016. Seasonal dynamics in dissolved organic matter, hydrogen peroxide, and cyanobacterial blooms in Lake Erie. **Frontiers in Marine Science** vol. 3, art. 54, http://dx.doi.org/10.3389/fmars.2016.00054
- Abbott, B. et al. 2016. Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire. An expert assessment. **Environmental Research Letters** 11, 034014. doi:10.1088/1748-9326/11/3/034014
- Crumsey, J. M., Y. Capowiez, M. M. Goodsitt, S. Larson, J. M. Le Moine, J. A. Bird, G. W. Kling, K. J. Nadelhoffer. 2015. Exotic earthworm community composition interacts with soil texture to affect redistribution and retention of litter-derived C and N in northern temperate forest soils. **Biogeochemistry** 126:379–395. *doi* 10.1007/s10533-015-0164-6
- Cory, R. M., K.H. Harrold, B. T. Neilson, and G.W. Kling. 2015. Controls on dissolved organic matter (DOM) degradation in a headwater stream: the influence of photochemical and hydrological conditions in determining light-limitation or substrate-limitation of photodegradation. **Biogeosciences** 12:6669-6685. *doi:10.5194/bg-12-6669-2015*
- Daniels, W. C., G. W. Kling, and A. E. Giblin. 2015. Benthic community metabolism in deep and shallow arctic lakes during 13 years of whole-lake fertilization. **Limnology and Oceanography** 60:1604-1618. *doi:* 10.1002/lno.10120
- Lee, O., H. Eicken, G. W. Kling, and C. Lee. 2015. A framework for prioritization, design and coordination of Arctic long-term observing networks: A perspective from the U.S. SEARCH Program. **Arctic** 68:Supplement 1, *doi:* 10.14430/arctic4450

- Adams, H. E., B. C. Crump, and G. W. Kling. 2015. Isolating the effects of storm events on arctic aquatic bacteria: temperature, nutrients, and community composition as controls on bacterial productivity. **Frontiers in Aquatic Microbiology** *doi:* 10.3389/fmicb.2015.00250
- Kling, G. W., W. C. Evans, and G. Z. Tanyileke. 2015. The comparative limnology of Lakes Nyos and Monoun, Cameroon. Pp. 401-425, In, D. Rouwet, F. Tassi, J. Vandemeulebrouck, B. Christienson (eds.), Volcanic Lakes, Springer-Verlag, Berlin. *doi: 10.1007/978-3-642-36833-2 18*
- Cory, R. M., C. P. Ward, B. C. Crump, and G. W. Kling. 2014. Sunlight controls water column processing of carbon in arctic fresh waters. **Science** 345:925-928. *doi:* 10.1126/science.1253119
- Adams, H. E., B. C. Crump, and G. W. Kling. 2014. Metacommunity dynamics of bacteria in a freshwater lake; the role of species sorting and mass effects. **Frontiers in Aquatic Microbiology** 5(82):1-10. *doi:* 10.3389/fmicb.2014.00082.
- Hobbie, J. E. and G. W. Kling, editors. 2014. A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. *Oxford University Press*, 331 pp.
- Kling, G. W., H. E. Adams, N. D. Bettez, W. B. Bowden, B. C. Crump, A. E. Giblin, K. E. Judd, K. Keller, G. W. Kipphut, E. R. Rastetter, G. R. Shaver, M. Stieglitz. 2014. Land-Water Interactions. Pg. 143-172 *in* J. E. Hobbie and G. W. Kling, editors, A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. Oxford University Press.
- Oswald, W. W., L. B. Brubaker, F. S. Hu, and G. W. Kling. 2014. Late-Quaternary Environmental and Ecological History of the Arctic Foothills, Northern Alaska. Pg. 81-89 *in* J. E. Hobbie and G. W. Kling, editors, A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. Oxford University Press.
- Shaver, G. R., J. A. Laundre, M. S. Bret-Harte, F. S. Chapin, III, A. E. Giblin, L. Gough, S. E. Hobbie, G. W. Kling, M. C. Mack, J. C. Moore, K. J. Nadelhoffer, E. B. Rastetter, and J. P. Schimel. 2014. Terrestrial Ecosystems at Toolik Lake, Alaska. Pg. 90-142 *in* J. E. Hobbie and G. W. Kling, editors, A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. Oxford University Press.
- Luecke, C., A. E. Giblin, N. Bettez, G. Burkart, B. C. Crump, M. E. Evans, G. Gettel, S. MacIntyre, W. J. O'Brien, P. Rublee, and G. W. Kling. 2014. The Response of Lakes near the Arctic-LTER to Environmental Change. Pg. 238-286 in J. E. Hobbie and G. W. Kling, editors, A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. Oxford University Press.
- Hobbie, J. E. and G. W. Kling. 2014. Ecological Consequences of Present and Future Change in Arctic Alaska. Pg. 303-324 *in* J. E. Hobbie and G. W. Kling, editors, A Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes. Oxford University Press.
- Crumsey, J., J. LeMoine, Y. Capowiez, M. Goodsitt, S. Larson, G. W. Kling, and K. Nadelhoffer. 2013. Community–specific impacts of exotic earthworm invasions on soil carbon dynamics in a sandy temperate forest. **Ecology** 94:2827–2837.
- Page, S. E., G. W. Kling, M. Sander, K. H. Harrold, J. R. Logan, K. McNeill, R. M. Cory. 2013. Dark formation of hydroxyl radical supports high rates of dissolved organic matter oxidation in arctic soil and surface waters. **Environment, Science, & Technology** 47:12860–12867 DOI:10.1021/es403326
- Cory, R. M., B. C. Crump, J. A. Dobkowski, and G. W. Kling. 2013. Surface exposure to sunlight stimulates CO₂ release from permafrost soil carbon in the Arctic. **Proc. National Academy of Sciences** 110:3429-3434, doi/10.1073/pnas.1214104110. 10.1073/pnas.1214104110

- Crump, B. C., L. A. Amaral-Zettler, and G. W. Kling. 2012. Microbial diversity in arctic freshwaters is structured by inoculation of microbes from soils. **The ISME Journal** 2012:1-11. doi:10.1038/ismej.2012.9
- Eugster, W. and G. W. Kling. 2012. Performance of a low-cost methane sensor for ambient concentration measurements in preliminary studies. **Atmospheric Measurement Techniques** 5:1925–1934. doi:10.5194/amt-5-1925-2012
- Merck, M. F., B. T. Neilson, R. M. Cory, and G. W. Kling. 2011. Variability of in-stream and riparian storage in a beaded arctic stream. **Hydrological Processes** DOI:10.1002/hyp.8323.
- Adams, H. E., B. C. Crump and G. W. Kling. 2010. Temperature controls on aquatic bacterial activity and community dynamics. **Environmental Microbiology** 12:1319-1333.
- Rastetter, E. B., M. Williams, K. L. Griffin, B. L. Kwiatkowski, G. Tomasky, M. J. Potosnak, P. C. Stoy, G. R. Shaver, M. Stieglitz, J. E. Hobbie, and G. W. Kling. 2010. Processing arctic eddy-flux data using a simple carbon-exchange model embedded in the ensemble Kalman filter. **Ecological Applications** 20:1285-1301.
- Keller, K., J. D. Blum, and G. W. Kling. 2010. Stream geochemistry as an indicator of increasing thaw depth in an arctic watershed. **Chemical Geology** 273:76-81.
- Hecky, R. E., Mugidde, R., Ramlal, P. S., Talbot, M. R., Kling, G. W. 2010. Multiple stressors cause rapid ecosystem change in Lake Victoria. **Freshwater Biology** 55:19-42.
- Bosch, N. S., T. H. Johengen, J. D. Allan, and G. W. Kling. 2009. Nutrient fluxes across reaches and impoundments in two southeastern Michigan watersheds. Lake and Reservoir Management 25: 389-400.
- Kling, G. W. 2009. Lakes of the Arctic. pp. 577-588 In Gene E. Likens (Editor), Encyclopedia of Inland Waters, volume 2. Oxford: Elsevier.
- Schiesari, L., E. E. Werner & G. W. Kling. 2009. Carnivory and resource-based niche differentiation in anuran larvae: implications for food web and experimental ecology. **Freshwater Biology** 54: 572-586.
- MacIntyre, S., J. P. Fram, P. J. Kushner, N. D. Bettez, W. J. O'Brien, J. E. Hobbie, and G. W. Kling. 2009. Climate-related variations in mixing dynamics in an Alaskan arctic lake. **Limnology and Oceanography** 54: 2401-2417.
- Kusakabe, M., T. Ohba, I. Issa, Y. Yoshida, H. Satake, T. Ohizumi, W. C. Evans, G. Tanyileke, and G. W. Kling. 2008. Pre- and post-degassing evolution of CO₂ in Lakes Monoun and Nyos, Cameroon. **Geochemical Journal** 42:93-118.
- McNamara, J., D. Kane, J. Hobbie, and G. W. Kling. 2008. Hydrologic and biogeochemical controls on the spatial and temporal patterns of nitrogen and phosphorus in the Kuparuk River, arctic Alaska. **Hydrological Processes** 22:3294–3309, DOI: 10.1002/hyp.6920.
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- Oswald, W., F.S. Hu, L. Brubaker, and G. Kling. 2000. Geomorphic and Climatic Controls on Holocene Ecosystem Changes in the Arctic Foothills of Alaska. American Geophysical Union, National Meeting, 13-17 December, San Francisco. AGU.
- Stieglitz, M., A. Giblin, J. Hobbie, M. Williams, and G. Kling. 1999. Climate, water, and carbon: Modeling CO₂ flux variability in arctic tundra. American Geophysical Union, National Meeting, 13-17 December, San Francisco. AGU 80(46):F64.
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- Kling, G. W., J.Y. King, K.K. Thieler, W.S. Reeburgh, K.J. Nadelhoffer, and L.C. Johnson. 1999. Dissolved C Dynamics Control CO₂ and CH₄ Release from the Tundra. Proceedings of the Annual meeting of NSF-Arctic System Science, Land-Air-Ice-Interactions. 11-13 March, Seattle, Washington, p. 56.
- Brubaker, L.B., W.W. Oswald, F.S. Hu and G.W. Kling. 1999. Effects of climate-landscape interactions on vegetation, soil processes, and carbon storage in arctic Alaska during the Holocene. Proceedings of the Annual meeting of NSF-Arctic System Science, Land-Air-Ice-Interactions. 11-13 March, Seattle, Washington, p. 42.
- Nadelhoffer, K.J., K.K. Thieler, M.R. Downs, L.C. Johnson, W.M. Loya, G.W. Kling, J.Y. King, and W.S. Reeburgh. 1999. Plant Carbon Allocation in Moist and Wet Tundra Mesocosms. Proceedings of the Annual meeting of NSF-Arctic System Science, Land-Air-Ice-Interactions. 11-13 March, Seattle, Washington, p. 68.
- Walter, L.M., L.M. Abriola, J.M. Budai, G.W. Kling, P.A. Meyers, J.A. Teeri and D.R. Zak. 1999. Carbon exchange dynamics in a temperate forested watershed (northern Michigan). Proceedings of the EPA-NSF Water and Watersheds Program Review, 19-21 April, Silver Springs, MD, p. 111-112.

- Kling, G.W., J.E. Hobbie, P.A. Rublee, G.W. Kipphut, M. Bahr and N. Bettez. 1999. Bacterial processing of DOC what controls are really important at an ecosystem scale? American Society of Limnology and Oceanography, National Meeting, 1-5 February 1999, Santa Fe, New Mexico. p. 101.
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- Hobbie, J., B. Peterson, N. Bettez, L. Deegan, J. O'Brien, G. Kling, G. Kipphut. 1999. Impact of global change on biogeochemistry and ecosystems of freshwaters. American Society of Limnology and Oceanography, National Meeting, 1-5 February 1999, Santa Fe, New Mexico. p. 86.
- Kling, G. W. 1998. Carbon cycling in arctic regions. Abstracts of the 10th annual meeting of the Arctic Research Consortium of the U.S., 22-24 March, Smithsonian Institute, Washington D.C.
- Walter, L., J. Budai, T. Ku, L. Abriola, Y.-M. Chen, D. Zak, G. Kling, P. Meyers, & K. Baptist. 1998. Carbon exchange dynamics and mineral weathering in a temperate forested watershed. The Eighth Annual V.M. Goldschmidt Conference, 30 August 3 September, Toulouse, France.
- Kling, G. W. and J. E. Hobbie. 1997. Ten years of work on bacteria what did they teach us? American Society of Limnology and Oceanography, National Meeting, 10-14 February 1997, Santa Fe, New Mexico. p. 210.
- Kling, G. W. 1997. Patterns and causes of CO₂ saturation in surface waters at landscape and continental scales: results of a multi-investigator workshop. American Society of Limnology and Oceanography, National Meeting, 10-14 February 1997, Santa Fe, New Mexico. p. 210.
- Ramlal, P. S., G. W. Kling, and R. Mugidde. 1997. Seasonal and spatial differences in surface water POM in Lake Victoria, East Africa. American Society of Limnology and Oceanography, National Meeting, February 1997, Santa Fe, New Mexico, p.277.
- Kling, G. W., G. Kipphut, W. B. Bowden, K. Edwardson. 1996. Carbon balance in arctic regions: the role of lakes and streams. American Geophysical Union, National Meeting, 15-19 December, San Francisco. p. F257.
- Kling, G., F. Bugenyi, A. Giblin, R. Hecky, J. Kitchell, S. MacIntyre, P. Ramlal, P. Reinthal. 1996. Ecosystem Processes in Lake Victoria from mud to fish. Great Lakes of the World Symposium, 15-19 July 1996, Victoria Falls, Zimbabwe.
- Hobbie, J. E., G. W. Kling, P. A. Rublee. 1996. Controls of bacterial numbers and productivity in an arctic lake. Ecological Society of America, National Meeting, 11-15 August 1996, Providence, Rhode Island, p.197.
- Mugidde, R., R. Hecky, G. Kling. 1996. Spatial-temporal variation of phytoplankton primary production in Lake Victoria, Uganda. Great Lakes of the World Symposium, 15-19 July 1996, Victoria Falls, Zimbabwe.
- Ramlal, P., L. Ndawula, R. Mugidde, G. Kling, R. Hecky. 1996. Diurnal Fluctuations in P_{CO2}, DIC, and oxygen at inshore sites in Lake Victoria, Uganda. Great Lakes of the World Symposium, 15-19 July 1996, Victoria Falls, Zimbabwe.
- Kling, G. W., R. Mugidde, P. S. Ramlal, R. E. Hecky. 1996. Carbon Dynamics in lake Victoria -- where did all the CO₂ go? American Society of Limnology and Oceanography, National Meeting, 16-20 June 1996, Milwaukee, Wisconsin, p. 62.

- Giblin, A., F. Bugenyi, G. Kling, P. Ramlal, M. Magumba. 1996. Respiration and nutrient release from Lake Victoria sediments: effects of anoxia and added sulfate concentrations. American Society of Limnology and Oceanography, National Meeting, 16-20 June 1996, Milwaukee, Wisconsin, p. 51.
- Kling, G. W., G. W. Kipphut, W. B. Bowden, C. Dahm. 1995. Using SF₆ to estimate the flux of CO₂ and CH₄ from arctic streams. American Society of Limnology and Oceanography, National Meeting, 11-15 June, Reno, Nevada, p. 27.
- Hobbie, J. E., M. Bahr, G. W. Kipphut, G. W. Kling. 1995. Bacteria and the utilization of DOC during spring runoff in an arctic lake. American Society of Limnology and Oceanography, National Meeting, 11-15 June, Reno, Nevada, p. 20.
- Rublee, P. A., J. E. Hobbie, N. Bettez, G. W. Kling. 1995. Microplankton in oligotrophic arctic LTER lakes: tight couplings and limited role. American Society of Limnology and Oceanography, National Meeting, 11-15 June, Reno, Nevada, p. 48.
- Kling, G. W., T. Kratz and J. Cole. 1993. Carbon Dynamics in aquatic ecosystems: continental-scale patterns and landscape-scale processes. NSF Long-Term Ecological Research Meeting, 18-24 September, Estes Park, CO. p. 9.
- Cole, J. J., N. F. Caraco, G. E. Likens and G. W. Kling. 1993. Measured and calculated PCO2 indicate that lakes are a source, not a sink, for atmospheric CO₂. American Society of Limnology and Oceanography, National Meeting, 30 May 3 June, Edmonton, Alberta.
- Kling, G. W., W. C. Evans, M. L. Tuttle, and G. Tanyileke. 1992. Forecasting the endpoints of geochemical evolution in gas-rich lakes: equilibrium, gas bursts, or controlled degassing. International Symposium on Hazardous Crater Lakes, 19-24 October, Misasa, Japan. p. 3.
- Evans, W. C., L. D. White, M. L. Tuttle, G. W. Kling, G. Tanyileke, and R. Michel. 1992. Six years of change at Lake Nyos, Cameroon, yield clues to the past and cautions for the future. International Symposium on Hazardous Crater Lakes, 19-24 October, Misasa, Japan. p. 2.
- Kling, G. W., J. E. Hobbie, and P. A. Rublee. 1992. What controls the bacteria in lakes algal DOC, terrestrial DOC, or grazing. American Society of Limnology and Oceanography, National Meeting, 9-14 February, Sante Fe, NM. p. 10.
- Kling, G. W. and B. J. Peterson. 1992. Pathways of nitrogen flow in whole lakes and rivers stressed by fertilization. Societas Internationalis Limnologiae, 25th International Meeting, 21-27 August, Barcelona, Spain. p. 314.
- Meili, M., B. Fry, G. W. Kling. 1992. The utilization of humic substances in pelagic food webs: evidence from natural isotopes (13C, 15N) in boreal forest lake food webs. American Society of Limnology and Oceanography, National Meeting, 9-14 February, Sante Fe, NM. p. 25.
- Kling, G. W. 1991. Stable isotopes and ecosystem-scale experiments in lakes. American Chemical Society, National Meeting, 14-19 April, Atlanta, GA. p. 71.
- Evans, W. C., L. D. White, M. L. Tuttle, G. W. Kling. 1991. Methanogenesis in gassy African lakes: an important release trigger. 10th International Symposium on Environmental Biogeochemistry, 19-23 August, San Francisco, CA. p. 12-13.
- Kling, G. W., A. E. Giblin, B. Fry, and B. J. Peterson. 1990. Control of lake alkalinity generation by seasonal turnover: experiments on sediment oxidation. American Society of Limnology and Oceanography, National Meeting, 10-15 June, Williamsburg, VA. p. 49.
- Kling, G. W., G. W. Kipphut, and M. C. Miller. 1990. Arctic lakes and streams as gas conduits to the atmosphere: implications for tundra carbon budgets. American Geophysical Union, National Meeting, December 1990, San Francisco, CA.

- Kling, G. W., B. Fry, M. C. Miller, and W. J. O'Brien. 1989. Tracing trophic interactions using 15N additions to an arctic lake. American Society of Limnology and Oceanography, National Meeting, 18-22 June, Fairbanks, p.30
- Kling, G. W., W. C. Evans, and M. L. Tuttle. 1989. A comparative view of Lakes Nyos and Monoun, Cameroon, West Africa. Societas Internationalis Limnologiae, 24th International Meeting, 13-19 August, Munich, Germany. p. 204.
- Evans, W. C., S. Robinson, L. D. White, G. W. Kling, and M. L. Tuttle. 1989. Isotopic studies of lakes Nyos and Monoun, Cameroon. American Geophysical Union, National Meeting, San Francisco, CA, EOS vol. 70, p. 1377.
- Saunders, J. F., and G. W. Kling. 1988. Clams and water chemistry in the Colorado Front Range. American Society of Limnology and Oceanography, National Meeting, 12-16 June, Boulder, CO. p. 72.
- Kling, G. W. 1987. Seasonal mixing and catastrophic degassing in tropical lakes. North American Lakes Management Society, National Meeting, 3-7 November, Orlando, FL. p.41.

Publication Statistics

Citation indices	All	Since 2014
<u>Citations</u>	11194	5059
<u>h-index</u>	52	40
i10-index	109	84

Professional Experience:

- NSF-SEARCH Science Steering Committee Meeting, 6-7 September, NCAR, Boulder, CO.
- NSF-SEARCH Science Steering Committee Meeting, 12-13 March, NCAR, Boulder, CO.
- NSF-SEARCH Program Science Meeting, 27-29 June 2017, UAF, Fairbanks, AK.
- NSF LTER Program Site Review Team, Lead. Division of Environmental Biology, 2017.
- NSF-SEARCH Science Steering Committee Meeting, 24-25 May 2016, NCAR, Boulder, CO.
- NSF LTER Program Site Review Team, *Member*. Division of Environmental Biology and Division of Ocean Sciences, 2015.
- NSF-SEARCH Kick-Off Tactics Meeting, *Knowledge to Action for Arctic Science* 16–17 September 2014, NCAR, Boulder, CO.
- STEM-Africa International Conference, *Invited Speaker*. "Effective US Strategies for African STEM Collaborations, Capacity Building and Diasporas Engagements." 1-4 April 2014, Ann Arbor, MI.
- OSTP (White House Office of Science and Technology Policy) NSF Meeting. Interagency Prioritization, Implementation, and Sustaining of Long-term Arctic Observations, 28 January 2014, Washington, D.C.
- NSF Panel Member, Division of Environmental Biology, Washington, D.C., 2013.
- NASA/DOE Panel Member, Carbon Cycle Science, Washington, D.C., 2013.
- NAS NRC Workshop, *Invitee*. Permafrost and Remote Sensing, 8-9 October 2013, Fairbanks AK.
- NSF Science Steering Committee Member for the Office of Polar Programs, Arctic System Science (SEARCH). Appointed October 2007 to present.

- NSF NEON (National Ecological Observatory Network) Science and Education Coordination Committee, Arctic Domain, 2009 to present.
- NSF LTER Workshop on Microbial Ecology, Michigan State University, 11-13 November, 2007.
- University of Umea International Conference on High Latitude Terrestrial and Freshwater Ecosystems: Interactions and Response to Environmental Change, *Invited Speaker*. 11-14 September 2007, Abisko, Sweden.
- NSF Workshop, *Panel Member*. Study of Environmental Arctic Change (SEARCH), Implementation Workshop. Lansdowne, VA, May 2005.
- Stanford University, International Symposium, *Invitee*. Whole Earth Systems: Science, Technology and Policy. Palo Alto, February 2005.
- NSF Workshop, Invitee. Future Directions of Limnology. Boulder, CO, December 2002.
- NSF Workshop, *Plenary Speaker*. Biodiversity of Planktonic Communities: Scaling up and down. Ann Arbor, MI, October 2002.
- NAS Workshop, *Invitee*. Economic and Ecological Impacts of Abrupt Climate Change. Washington, D.C., March 2001.
- NSF Workshop, *Invitee*. Comparative Aquatic Research. Salt Lake City, February 2000.
- NSF American-Norwegian Workshop, *Invitee*. Arctic Research Opportunities. Svalbard, Norway, August 1999.
- NSF Symposium, *Invited Speaker*. *The Arctic Forum*. Smithsonian Institution, Washington D.C., March 1998.
- NSF Workshop, *Invitee*. The Role of High Latitude Ecosystems in the Global Carbon Cycle. The Ecosystems Center, Marine Biological Laboratory, Woods Hole, October 1997.
- Nordic Council of Ministers and Academy for Advanced Study Workshop, *Keynote Speaker*. Climate Change Effects on Northern Terrestrial and Freshwater Ecosystems. Arctic Centre, University of Lapland, Rovaniemi, Finland, September 1997.
- NSF Workshop, *Invitee*. Ecological Variability and Organization of Lake Districts. Trout Lake Station, University of Wisconsin, Trout Lake, February 1997.
- NSF Site Review, *Member*. NSF-DEB and NSF-OPP review of McMurdo Long Term Ecological Research site, Antarctica, January 1997.
- National Science and Technology Council Workshop, *Invitee*. National Environmental Monitoring and Research. Smithsonian Institution, Washington, D.C., September 1996.
- NAS Symposium, *Invitee*. Frontiers of Science. National Academy of Science's Beckman Center, Irvine, California, November 1996.
- NSF Panel *Member*, Division of Environmental Biology, Ecosystems Program. 1996-1999.
- NSF Workshop, *Invitee*. Inter-American Institute for Global Change, research directions. Experimental Lakes Area & Delta Marsh Station, Manitoba, August 1996.
- Chapman Conference, *member of Organizing Committee*. Crater lakes, terrestrial degassing, and hyper-acid fluids in the environment. Crater Lake, Oregon, September 1996.
- NSF Workshop, *Co-Organizer*. Direct Methods of Dissolved CO₂ Analysis. Experimental Lakes Area and Freshwater Institute, Manitoba, October 1995.
- NSF Workshop, *Invitee*. Arctic System Science, Land-Atmosphere-Ice Interactions. Orcas Island, Washington, March 1995.
- NSF Workshop, *Organizer*. Carbon Dynamics in Aquatic Ecosystems. Woods Hole, Massachusetts, February 1995.

- EPA U.S. Geological Survey NSF Workshop, *Invitee*. Freshwater Ecosystems and Climate Change in North America. Leesburg, Virginia, October 1994. NSF Advisory Panel, Office of Polar Programs. Arlington, Virginia, September 1994.
- NSF Workshop, *Co-Organizer*. CO₂ Saturation in Surface Waters. Trout Lake, Wisconsin, February 1994.
- MacArthur Foundation Conference, *Invitee*. Managing the Ecology of Africa's Fragile Lakes. Michigan State University, Lansing, Michigan, February 1994.
- NSF Workshop, *Invitee*. The Role of Biodiversity in Arctic and Alpine Tundra Ecosystems. Kongsvold, Norway, August 1993.
- NSF Workshop, *Invitee*. Biodiversity in Africa: Research Opportunities and Constraints. Arlington, Virginia, April 1993.
- NSF Workshop, *Invitee*. Biodiversity and Changes in the Lake Victoria Ecosystem. Uganda, August 1992.
- UNESCO Workshop, *Invitee*. Eliminating the Risks of Gas-charged African Lakes. Paris, France, September 1992.
- International Symposium, *Invitee*. Study and Mitigation of Hazardous Crater Lakes. Misasa, Japan, October 1992.
- Member Steering Committee, Elected. IAVCEI Commission on Crater Lakes, 1990-present.
- NSF Workshop, *Invitee*. The Use of Stable Isotopes in Ecological Research. Woods Hole, October 1989.
- National Workshop, *Invitee*. Scientific Research and High School Science Teachers. Marine Biological Lab, Woods Hole, October 1989.
- National Symposium, *Invitee*. North American Lake Management Society, Orlando, November 1987.
- National Symposium, Invitee. American Meteorological Society, Chapel Hill, November 1987.
- *Member* of U.S. State Department scientific team sent to Cameroon, West Africa to investigate the Lake Nyos gas disaster, 1986.
- Consultant to U.S. Ambassador and Cameroonian Minister of Higher Education and Scientific Research regarding hazard mitigation of the lethal Lakes Nyos and Monoun, Yaoundé, 1986-present.

Invited Seminars presented:

- "The Role of Microbes and Photochemistry in Arctic Carbon Cycling", Presented at Miami University, Department of Microbiology, September 2016.
- "The Killer Lakes of Africa: Lethal Gas Bursts in Lakes and Oceans", Presented at Miami University, Department of Biology, September 2016.
- "Taming the Killer Lakes of Africa", Presented at the University of Michigan Saturday Morning Physics event, March 2010.
- Marine Biological Lab, "Semester in Environmental Science", guest scientist for undergraduate course, public seminar to Woods Hole community, 22-23 October, 2009.
- Columbia University, Lamont-Doherty Earth Observatory, *Earth Science Colloquium*, and Biology and Paleo Environment Division seminar. October 2008.
- Michigan State University, *Invited speaker* for an NSF LTER Workshop on Microbial Ecology, 11-13 November, 2007.

Abisko Research Station, Univ. of Umea, Sweden. *Invited Speaker*, International Conference on High Latitude Terrestrial and Freshwater Ecosystem, September 2007, Abisko, Sweden.

School of Natural Resources and Environment, Special seminar series, University of Michigan, November 2001.

Department of Zoology and Center for Limnology, visiting "Kaeser Scholar", University of Wisconsin, Madison, March 2000

Department of Biology, McGill University, Montreal, October 1997.

Department of Biological Sciences, University of Quebec, Montreal, October 1997.

Arctic Centre, University of Lapland, Rovaniemi. Keynote address, September 1997.

Department of Ecology, Evolution, and Behavior, "Lindeman Lecture", University of Minnesota, October 1996

Chapman Conference, Crater Lake, Oregon, September 1996.

Department of EPO Biology and INSTAAR, University of Colorado, February 1995.

Department of Environmental Science, Policy, and Management, University of California, Berkeley, February 1995.

Department of Geology, "Scott Turner Lecture", University of Michigan, January 1995.

University of Makawere, Uganda. May 1994 and 1995.

Goddard Space Flight Center, NASA, Washington, D.C., March 1994.

School for Public and Environmental Affairs, Indiana University, April 1991.

Department of Biology and Center for Great Lakes and Aquatic Sciences, University of Michigan, April 1991.

Department of Zoology, Arizona State University, March 1990.

Department of Biological Sciences, Notre Dame University, March 1990.

Institute for Ecosystem Studies, Cary Arboretum, Millbrook, March 1990.

Institute for Limnology, Uppsala University, Uppsala, Sweden, July 1990.

Kellogg Biological Laboratory, Michigan State University, January 1989.

The Ecosystems Center, Marine Biological Lab, Woods Hole, September 1987.

Limnological Research Center, University of Minnesota, November 1987.

Queen Mary College, University of London, 1986.

Professional Affiliations and Service (extramural):

<u>Memberships</u>:

American Association for the Advancement of Science

American Society of Limnology and Oceanography

American Geophysical Union

Ecological Society of America

International Society for Microbial Ecology

International Association of Volcanology and Chemistry of the Earth's Interior

East African Hydrobiological Society

North American Lake Management Society

Societas Internationalis Limnologiae

Service:

Member, Conference Organizing Committee, "ARCTIC FUTURES 2050: Science to Inform Decisions". Supported by NSF, BOEM, DOE, ONR, NOAA; 4-6 September 2019, National Academy of Sciences, Washington, D.C.

Vice Chair, Science Steering Committee, NSF Division of Polar Programs, SEARCH. 2018 -

Member, Science Steering Committee, NSF Division of Polar Programs, SEARCH. 2007-2018.

Member, NSF PolarTREC Teacher Fellowship evaluation committee, 2015.

Member, NEON (National Ecological Observatory Network) - Science and Education Coordination Committee, Arctic Domain, 2009 – .

Member, NSF Arctic LTER Project Executive Committee, 1991 – .

Chair, Ruth Patrick Award Committee, American Society of Limnology and Oceanography. 2009-2011.

Member, Ruth Patrick Award Committee, American Society of Limnology and Oceanography. 2008.

National Representative, International Society of Limnology (SIL). Elected 2007-2009.

Lead Author, 2001 –, Special Report on the "Ecological Consequences of Climate Change in the U.S. Great Lakes Region". 3rd in a special series produced by the Ecological Society of America and the Union of Concerned Scientists, released April 2003.

Chair, International Advisory Group on the Nyos-Monoun Degassing Project, 1995 – . *Member*, Steering Committee, IAVCEI International Commission on Volcanic Lakes, 1990 – .

Editorial:

Associate Editor for *Limnology and Oceanography*, 2001 – 2015. Associate Editor for *Arctic, Antarctic, and Alpine Research*, 2019 –

Grant Proposal Reviews:

- **U.S. National Science Foundation**, *Programs of*: Ecology; Ecosystems; Long-Term Studies; Surficial Processes; Biological Oceanography; Volcanology and Mantle Geochemistry; Polar Biology and Medicine; International Research; Office of Polar Programs (Arctic Natural Sciences, Arctic System Science).
- U.S. Department Of Energy (DOE), National Institute of Global Environmental Change.
- U.S. National Aeronautics and Space Administration (NASA)
- U.S. National Oceanic and Atmospheric Administration (NOAA)
- U.S. Environmental Protection Agency (EPA)
- **U.S.** Department of Agriculture
- U.S. Agency for International Development (USAID)

NERC (Natural Environment Research Council), United Kingdom

National Geographic Society

Organization of Tropical Studies

Canadian Natural Sciences and Engineering Research Council

Israel Science Foundation

Scientific Paper Reviews:

Science; Nature; PNAS; Ecology; Ecological Monographs; Ecology Letters; Limnology and Oceanography; American Naturalist; Nature Communications; Ecosystems; Biogeochemistry; Freshwater Biology; Climatic Change; Hydrobiologia; Ecological Applications; J. North American Benthological Society; J. Geophysical Research; Natural Hazards; J. Volcanology and Geothermal Research; Bulletin of Volcanology; American Midland Naturalist; Global Biogeochemical Cycles; Geophysical Research Letters; International Society of Microbial Ecology (ISME).

Scientific Outreach (Published or Broadcast Interviews; Reports; Lectures):

"An Unfrozen North". By J. Madeleine Nash, 19 February 2018, **High Country News**, https://www.hcn.org/issues/50.3/an-unfrozen-north

"Exploding Killer Lakes". By Taylor Mayol, 2 March 2016, **OZY**, http://www.ozy.com/flashback/exploding-killer-lakes/65346

"Arctic Sunlight Can Speed Up the Greenhouse Effect". By Susan Linville, **Moments in Science**, Posted February 27, 2015. http://indianapublicmedia.org/amomentofscience/arctic-sunlight-speed-greenhouse-effect/

 $\frac{\text{http://ns.umich.edu/new/releases/22338-climate-clues-sunlight-controls-the-fate-of-carbon-released-}{\text{from-thawing-arctic-permafrost}}$

http://oregonstate.edu/ua/ncs/archives/2014/aug/science-study-sunlight-not-microbes-key-co2-arctic http://www.sciencedaily.com/releases/2014/08/140821141548.htm

 $\underline{\text{http://www.aninews.in/newsdetail9/story180338/it-039-s-sunlight-that-controls-carbon-dioxide-in-arctic.html}$

http://www.sciencecodex.com/sunlight not microbes key to co2 in arctic-140097

http://www.eurekalert.org/pub_releases/2014-08/uom-sct081514.php

http://phys.org/news/2014-08-sunlight-microbes-key-co2-arctic.html

 $\underline{\text{http://www.laboratoryequipment.com/news/2014/08/sunlight-controls-fate-permafrosts-released-carbon}$

http://www.business-standard.com/article/news-ani/it-s-sunlight-that-controls-carbon-dioxide-in-arctic-114082200579 1.html

http://www.eurasiareview.com/22082014-sunlight-microbes-key-co2-arctic/

 $\frac{http://www.rdmag.com/news/2014/08/sunlight-controls-fate-carbon-released-thawing-arctic-permafrost}{}$

http://zeenews.india.com/news/eco-news/sunlight-not-bacteria-key-to-co2-in-arctic_956515.html

 $\frac{http://www.deccanchronicle.com/140822/lifestyle-offbeat/article/its-sunlight-controls-carbon-dioxide-arctic}{dioxide-arctic}$

http://www.science20.com/news_articles/sunlight_to_blame_for_co2_release_in_arctic_permafrost_not_microbes-143172

 $\frac{http://www.hngn.com/articles/40020/20140822/sunlight-not-bacteria-responsible-for-most-of-arctics-co2-conversion.htm}{}$

http://www.capitalotc.com/sunlight-not-microbes-causes-carbon-dioxide-release-in-the-arctic/2954/

http://www.natureworldnews.com/articles/8676/20140822/sunlight-microbes-control-carbon-release-arctic.htm

- "Environmental educator learns about climate change in Alaska during his latest expedition". By Ben Horowitz, **The Star-Ledger**, 18 August 2013, http://www.nj.com/morris/index.ssf/2013/08/environmental_educator.html
- "Slumping Arctic Soils Produce Significant Amounts of CO₂". By Carolyn Gramling, **Science NOW**, <u>www.sciencemag.org</u> 11 February 2013. *Reprinted by 1 additional news agency*.
- "Sunlight stimulates release of carbon dioxide in melting permafrost". By Monte Morin, **Los Angeles Times**, 12 February 2013. *Reprinted by 2 additional news agencies*.
- "Nearing a Tipping Point on Melting Permafrost?". By: Michael D. Lemonick, Climate Central, www.climatecentral.org, 21 February 2013. *Reprinted by the Huffington Post*.
- "Arctic sunshine cranks up threat from greenhouse gases". By Fred Pearce, **New Scientist**, Issue 2904, 11 February 2013.
- "Climate Happens Anyway: The Death of Permafrost". By Charles P. Pearce, **The Politics Blog**, Esquire.com, 13 February 2013.
- "Arctic Soil Releases Dangerous Levels of CO₂, Speeding Global Warming". By Catherine Griffin, **Science World Report**, 12 February 2013. *Reprinted by 2 additional news agencies*.
- "Arctic sunshine revs up greenhouse gases". **United Press International**, www.UPI.com, 11 February 2013. *Reprinted by 1 additional news agency.*
- "Thawing Arctic set to release tonnes of stored carbon". By Tim Radford, Climate News Network, 12 February 2013. *Reprinted by 3 additional news agencies*.
- "Sunlit Permafrost Unleashes Carbon at Faster Pace". By Douglas Main, **LiveScience.com**, 11 February 2013. *Reprinted by 2 additional news agencies*.
- "Melting tundra releases CO₂ more quickly than previous estimates". By Christa Marshall, **Scientific American and Climate Wire**, 12 February 2013. *Reprinted by 1 additional news agency*.
- "Arctic Slumping". By Andy Soos, Environmental News Network, 12 February 2013.
- "Sunlight stimulates release of climate-warming gas from melting Arctic permafrost". By Jim Erikson, University of Michigan News Service, 11 February 2013. Reprinted by 7 additional news agencies.
- "Permafrost melt to boost atmospheric CO₂ faster than thought". By Rik Myslewski, **The Register**, 12 February 2013.
- "Permafrost Not So Permanent And What That Means For You". By Cody Bond, CampusProgress.org, 11 March 2013.
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- "Bestrahlter Permafrost". By Nadja Podbregar, Wissenschaft.de, 11 February 2013.
- "Melting arctic tundra releases a new climate change threat, UNC says". By Rick Smith, **WRAL Tech Wire**, 13 February 2013.
- "Sunlight ramps up CO₂ production from permafrost". By Kate Taylor, **TG Daily**, 13 February 2013.
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- "Thawing Permafrost May Be "Huge Factor" in Global Warming". By Stephen Leahy, **Inter Press**Service, 14 February 2013. *Reprinted by 1 additional news agency*.
- "Countdown to the End of the World". *The Weather Channel*, television program (1 hour). Produced by Richard Ross and Force Quite Productions, Los Angeles. First released 14 April 2013.
- Union of Concerned Scientists 'Education Day" 10-11 March 2010. Meeting with various members of Congress to discuss issues of global climate change and U.S. energy policy legislation.
- "A Deadly Fog". *National Geographic*, television program (1 hour). Produced by Simon Kerfoot and Tigress Productions, Bristol, UK. First released 5 December 2009.
- "Arctic ecology: Tundra's burning". By Jane Qiu, *Nature*, Volume 461, 2 September 2009. pp. 34-36. http://www.nature.com/news/2009/090902/full/461034a.html
- "A Lakeful of Trouble". By Anjali Nayar, *Nature*, Volume 460, 16 July 2009. pp. 321-323.
- "Scientists at Toolik Field Station investigate a warming Arctic". By Jennifer Weiss, *The Star-Ledger*, Sunday July 19, 2009.
- "Thaw point". By Jane Qiu, *The Economist*, 30 July 2009 (see also http://www.economist.com/sciencetechnology/displayStory.cfm?story_id=14119825).
- "Climate change called certain and most predictions are bad". By Tom Henry, *The Toledo Blade*, 13 October 2008.
- Environmental Journalism Boot Camp. Presentation at the MSU Knight Center for Environmental Journalism conference (Society of Environmental Journalists annual meeting, Roanoke VA, 15-19 October 2008).
- "Frozen Carbon and Climate Change". Public exhibition of research by G. Kling and K. Nadelhoffer, at University of Michigan Exhibit Museum theme semester "From Pole to Pole: Research at the Ends of the Earth", January June 2008.
- "Mega-Disasters methane and global extinction". *The History Channel and National Geographic*, television program (1 hour). Produced by Darryl Rehr, Creative Differences Films, Studio City, CA. First released 9 October 2007.
- "Danger Zones". By Cody Crane, Science World, 3 September 2007, Vol. 64, p. 18.
- "Volcanic Killer Lakes". *National Geographic 'Naked Science' series*, television program (1 hour). Produced by Jason Wells and Granada Studios, Manchester, England. First released 3 May 2007.
- "Confronting Climate Change in Michigan". Public lecture given at the University of Michigan Exhibit Museum, Theme Semester 'Wild Weather, Changing Climate', 31 January 2007.

- "Michiganders preach Al Gore's global warming gospel". By Tina Lam, *Detroit Free Press*, 19 February 2007, p.1.
- "Climate Change in the Great Lakes Region". **NPR broadcast**, Chicago Public Radio, produced by Kristin Moo, aired February 2007.
- "Cameroon's Exploding Lakes". **BBC Radio Programme** (30 min), produced by Kate Bissell, first released 17 January 2007.
- "A Convergence of Environmental Experts". By Jon Reidel, *The View, University of Vermont*, 25 October 2006. p. 1.
- Environmental Journalism Boot Camp. Presentation at the conference organized by the Knight Center for Environmental Journalism, 22-25 October 2006, Burlington, VT.
- "Lake Kivu Gas Extraction: Report on Lake Stability". Co-author of an expert-committee report produced for the World Bank and the Government of Rwanda (authors G. Kling, S. MacIntyre, J. Steenfelt, F. Hirslund). First released 12 July 2006, 104 pp.
- "The Exodus Decoded". *The History Channel*, television program (2 hours). Produced by Simcha Jacobovici, and Associated Producers, Toronto, Canada. First released 24 August 2006.
- "Exploding Lakes". By Megan Sever, *Geotimes*, December 2005, volume 50 number 12, p. 8-9.
- Briefing of U.S. House International Relations Committee and U.S. Office of Foreign Disaster Assistance on scientific results and mitigation options for natural hazards in Cameroon, West Africa. Washington D.C., 14 October 2005.
- "The monster of the lakes is only sleeping, scientists warn". New Scientist, 1 October 2005, p.15.
- "Gas Threat Grows from Lethal Lakes". By Ian Sample, *The Guardian*, London, p.11, 27 September 2005.
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- "Detox for Killer Lakes". By Henry Fountain, *The New York Times*, 27 September 2005. Based on research article in Proc. Nat. Academy of Sciences which led to ~25 other news articles published worldwide.
- BBC Radio Broadcasts, 27 September 2005. Story of degassing the Cameroon lakes led to 3 separate BBC radio interviews including World News and Up All Night.
- "Deadly Lakes may Explode Again". By Andreas von Bubnoff, *Nature*, 26 September 2005 (published online).
- Union of Concerned Scientists 'Education Day" 19-20 September 2005. Meeting with various members of Congress to discuss issues of global change and preserving scientific integrity, related to legislation *H.R.* 839 and *S.* 1358.
- "Confronting Climate Change". Lecture presented at the Great Lakes Environmental Journalism Training Institute, Knight Center for Environmental Journalism, Michigan State University. 8 June 2005.
- "Climate Change The Debate Heats Up: Jobs, Trade and National Security". By Mary Jo Frank. *Dividend*, Fall 2004, 1, 867.
- Great Lakes Media Tour 25 September 2003. Live broadcast interviews about climate change in the Great Lakes with 10 different television stations (ABC, NBC, CBS, FOX) and 9 radio stations in the Great Lakes region. Broadcast from Washington, D.C.
- "Climate Change in the Great Lakes". 26 September 2003, **Wisconsin Public Radio** (Statewide NPR), live 1-hour interview.
- "Defusing Africa's Killer Lakes". By Kevin Krajick, *Smithsonian* September 2003, p. 46-50.

- "Killer Lakes". *BBC* Television program (1 hour), Produced by Teresa Hunt, BBC studios, London. First released 4 April 2002 worldwide (except N. America); released May 2003 by *The Learning Channel* in N. America.
- "Confronting Climate Change in the Great Lakes Region". Lead Author of a report published by the Ecological Society of America and the Union of Concerned Scientists, April 2003, 92 pp. (www.ucsusa.org/greatlakes).
 - Outreach from this report (up to 2004) resulted in at least 37 Television interviews, 43 Radio interviews (broadcast to over 200 stations), and 82 newspaper and magazine articles, as well as at least 14 listserv announcements and 32 webpage links. Meetings with various members of congress resulted in Senator Durbin's (IL) testimony to the Senate on climate change on 20 July 2003 (using graphics and information from the report).
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- "The Monster in the Lake". By Nicola Jones, New Scientist, 24 March 2001.
- "Taming a monster: Researchers are trying to stop Lake Nyos in Africa from exploding and killing again". By Nicola Jones, *Current Science*, 7 December 2001, No. 8, Vol. 87; Pg. 10.
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- "Trying to Tame the Roar of Deadly Lakes". By Marguerite Holloway, *The New York Times*, 27 February 2001, p. D3.
- "Education: A day at the Lake". *Science Magazine* NetWatch, Volume 293, Number 5532, 10 August 2001.
- "Exploding Lake in Africa Vented with Siphon". By Brian Fortner, *Civil Engineering*, April 2001, p.25.
- "Scientists Begin Taming Killer Lake". By John Pickrell, *Science*, Volume 291:965-967 (2001).
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- "Taming Africa's Killer Lake". By Tom Clarke, *Nature*, Volume 409, pp. 554-555 (2001).
- "The Tundra Thaw". By Dan Fagin, Newsday, 28 November 2000, New York Editions p. C08.
- "Loon Lessons: Alaska Lake is Setting for Environmental Research". By Michael Mansur, *The Boulder Camera*, 17 September 2000, p.7D-8D.
- "The World's Most Deadly Bubble". By Robin McKie, *The London Observer*, 20 August 2000, p. 24.

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- "The Killing Lakes". By Marguerite Holloway, *Scientific American*, July 2000, pp. 92-99.
- "Global Change in the Arctic". By Jenni Laidman, *Toledo Blade*, 3 May 2000.
- "Volcanic Killers". *PBS and BBC-Granada Films* 60 minute film documentary. First aired 9 June 2000.
- "Cameroon's Killer Lakes". Interview with June Christie on **BBC** London, first aired 2 May 2000.
- "Scientists Set To Burst Bubble of Africa's Killer Lakes". By Hillary Mayell, *National Geographic News*, 26 April 2000, www.nationalgeographic.com/news.
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- "Just When You Thought it was Safe to go Back in the Water...". By David Brown, *The Vancouver Sun*, 3 February 2000, p. A15. (Also released in *The Toronto Sun*, 6 February 2000, Sunday Edition.)
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- "Killer Mist Lakes in Cameroon Poised to Erupt With Lethal Gas". By Amanda Onion, *Fox News*. September 14, 1999.
- "Global Warming is Here: the Scientific Evidence". April 1999. By Patrick Mazza and Rhys Roth, *Climate Solutions*, Olympia, WA.
- "Lake Nyos". Documentary television program produced for *The Learning Channel* (by Sachnoff-Lipman Entertainment). First aired February 1999.
- "The Changing Arctic". Documentary film produced by the *Public Broadcasting System* and the National Science Foundation. First aired 14 August 1997.
- "The Earth Does a Slow Burn". By Bill McKibben, *The New York Times*, **OP-ED**, 3 May 1997.
- "Study pulls the plug on Arctic's carbon sink". By Amy Hansen, NSF Frontiers, July/August 1997.
- "Pumping Carbon". By Janice O. Childress, Geotimes, March 1997, p.14
- "Gas released by melting Arctic may speed up global warming". By Sean Hargrave, *London Sunday Times*, January 5, 1997.
- "Arctic Tundra is Leaking More Carbon Scientists Say". Interview in December 1996 carried by *Reuters North American Wire* resulted in ~15 articles published in various newspapers, including the New York Times, Montreal Gazette, U.P.I., Detroit News, etc.
- "Natural Hazards and the Exploding Lakes of Africa", Lecture presented to the *Cranbrook Institute*, Michigan, September 1996.
- "Disarming deadly waters". By Robert Cooke, *Newsday*, May 1996, p. B21.

- "Model sheds light on a tragedy and a new type of eruption". By Ray Ladbury, *Physics Today*, May 1996, p. 20-22.
- "Running on Tundra". By David Berreby, *Discover Magazine*, June 1996, p. 74-81.
- "The Lake Nyos Disaster". By Ben Norse and Bernie Dittrich, *ChemMatters*, February 1996, p. 13-15.
- "Where the World Isn't so Cool Anymore". By Bill Dietrich, *The Seattle Times*, 17 September 1995, p. A1, A16-A18.
- "The world's lakes have more CO₂ than they can use". By John Walters, *National Public Radio*. Interview and broadcast, 6 October 1994.
- "Cameroon's killer lakes: A rising threat". By Richard Monastersky, *Science News* 145:215. 1994.
- "Killer lakes threaten to strike again". By Constance Holden (ed.), Science 264:26. 1994.
- "Understanding Lake Ecosystems from the Arctic to Africa". By Suzanne Tainter, *Research News*, University of Michigan, Spring 1994, p. 10-11.
- "Killer lakes". By Stephanie Lindloff, Sea Grant Institute. Interview and broadcast for *Earthwatch Radio*, 19 April 1994.
- "Solving the problems of Cameroon's killer lakes". By Robert McDonald; Interview and broadcast for *Quirks and Quarks*, *Canadian National Public Radio*, 20 April 1994.
- "A Letter From Toolik Lake: In Arctic's Spendor, the Secrets of Nature". By Heather Dewar, *Miami Herald*, 19 July 1992, p. 1C-4C.
- "Pumping Could Eliminate Lake's Deadly Gas Danger". By Nancy Ross-Flanigan, *Detroit Free Press*, 14 January 1992, p. 3B.
- "Recycling a Lake's Dangerous Gas". By Barry James, *International Herald Tribune*, 17 September 1992, p. 17.
- "Scientific Investigation of Lakes Nyos and Monoun". By G. W. Kling and W. C. Evans; Report Prepared for U. S. Ambassador Francis Cook for distribution to Cameroonian Government, Yaoundé, Cameroon, 6 April 1992.
- "U prof takes on volcanic 'killer lake' in West Africa". By Sally Pobojewski, *The University Record*, 13 January 1992, p. 11.
- "Arctic Remedy for Global Warming May Not Work". By Ruth Linton. Interview and broadcast for *BBC World Service Broadcast*, Discovery edition 877, 1991.
- "U-M Man Studies Deadly African Lake". Ann Arbor News, 19 December 1991, p. B1.
- "Ecologist Strives to Prevent African Lake Explosion". By Hugh McCann, The *Detroit News*, 23 December 1991, p. 2E.
- Interview about African Lakes with Donald Frederick at National Geographic resulted in 43 separate articles published in newspapers worldwide, staring May 1990.
- "Preliminary Report of the September 1990 Investigation of Lakes Nyos and Monoun". By G. W. Kling and W. C. Evans; Report prepared for U. S. Ambassador Francis Cook for distribution to Cameroonian Government, Yaounde, Cameroon, 30 September 1990.
- "Nyos, the Killer Lake, May Be Coming Back". By Richard Kerr, Science 244:1541-1542. 1989.
- "A Killer Lake in Cameroon". By George Kling, p. 271 In Science Year, Review of Science and Technology During the 1987 School Year. *World Book*, Inc., Chicago. 1988.
- "Lake Nyos was Rigged for Disaster". By Richard Kerr, Science 235:528-529. 1987.

- "Cameroon's Killer Lake". Feature article by Curt Stager, *National Geographic*, September 1987, p. 404-420.
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- "Plumbing the Depths of a Lethal Lake". *Discover Magazine*, May 1987, p. 12.
- "Death in Cameroon". By Dixie O'Connor, Leader *News of the Research Triangle*, Chapel Hill, NC, 8 October 1987, p. 14-17.
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- "There May be More than One Way to Make a Volcanic Lake a Killer". By Richard Kerr, *Science* 233:1257-1258. 1986.
- "Cameroon: The First Wave of Clues". By Stefi Weisburd, Science News 130:180-181. 1986.
- "Cameroon's Valley of Death". By Nancy Cooper, *Newsweek*, 8 September 1986, p. 26-28.

Teaching:

Participation in courses at The University of Michigan:

Limnology: Aquatic Ecology; EEB 483; 4 credit hours

Introduction to Global Change; Biology 110; 4 credit hours

Professional Development; EEB 525; 3 credit hours

Ecosystem Ecology; EEB/NRE/Environ 476; 3 credit hours

Hughes Aquatic Laboratory; EEB 473; 3 credit hours

Global Change III – Sustainability; UC 212; 4 credit hours

Oceanography; Biology 380; 3 credit hours

Introductory Biology Workshop; Biology 150; 1 credit hour

Ecosystems; EEB 800; 1-3 credit hours

Advanced Studies; EEB 700/730; 1-3 credit hours

Undergraduate Independent Study; Biology 300; 1-3 credit hours

Advanced Undergraduate Independent Study; Biology 400; 1-3 credit hours

Biogeochemistry; EEB 800; 1 credit hour

Discussions in EEB; EEB 800; 1 credit hour

Guest Lectures in courses at the University of Michigan:

Honors Biology; Biology 195 Biogeochemistry; AOSS 467

Current Topics in EEOB; Biology 685

Topics in Biology; Biology 498

Environmental Journalism; Environment 304

Undergraduate Honor's theses

- 1. Barbara Byrne (member of committee, completed 1992)
- 2. Lucy Kwon (member of committee, completed 1993)
- 3. Megan Ridley (member of committee, completed 1994)
- 4. Cecelia Sheridan (Chair of committee, completed 1996)

- 5. Elizabeth Graham (Chair of committee, completed 2005)
- 6. Kalub Fedak (member of committee, completed 2006)
- 7. Edna Chiang (member of committee, completed 2015)
- 8. Rebecca Cotton (member of committee, completed 2016)

Undergraduate research supervision

- 1. Rebecca Olson (Fall Term 1994)
- 2. Kyle Rackiewicz (Winter Term 1994)
- 3. Russell Richmond (Summer 1994, NSF-REU program)
- 4. Jennifer Petersen-Price (Winter Term 1995)
- 5. Prakash Pandalai (Winter Term 1995)
- 6. Alan Striegle (Fall 1995; Winter 1996; Summer 1996, NSF-REU program)
- 7. Amy Troesch (Summer 1996)
- 8. Marianette Gonzales (Spring 1997; Summer 1998)
- 9. Jill Pond (Summer 1998)
- 10. Erica Gwynn (Winter & Summer 1998, 1999 NSF-REU program)
- 11. Amanda Lynch (Fall 1998; Winter 1999; Winter 2000)
- 12. Robert Robke (Winter 2001)
- 13. Akbar Khan (Winter 2002)
- 14. Lindsey Barske (Summer 2002, NSF-REU program)
- 15. Julie Allen (Summer 2003, NSF-REU program)
- 16. Elizabeth Graham (Summer 2004, NSF-REU program; Fall 2004 & Winter 2005)
- 17. Maria Dzul (Summer 2005, NSF-REU program; Fall 2005; Winter & Summer 2006)
- 18. Ashley Larsen (Summer 2007, NSF-REU program)
- 19. Natalie Day (Summer 2007, NSF-REU program)
- 20. Jeff Boyar (Summer 2008, NSF-REU program)
- 21. Tracy Coolidge (Summer 2009, NSF-REU program)
- 22. Amy Markstein (Summer 2009, NSF-REU program)
- 23. Kelly Davis (Summer 2010, NSF-REU program and U-M SNRE internship)
- 24. Brittany Papworth (Summer 2012, NSF grant and Taylor Fellowship)
- 25. Anna Clinger (Summer 2013, NSF-REU program)
- 26. Kate Yuhas (Summer 2015, NSF-REU program)
- 27. Graham Stewart (Summer 2016, NSF-LTER)
- 28. Alexandria Kolenda (Summer 2017, NSF-LTER)
- 29. Johanne Albrigtsen (Summer 2018, NSF-LTER)
- 30. Emma Thronson (Fall 2019, U.M. Honors College)

Master's Students

- 1. Steffen Burkhardt (Member of committee, completed degree 1991)
- 2. Karen Riseng (Chair of committee, completed degree 1997)
- 3. Kristin Judd (Chair of committee, completed degree 1998)
- 4. Lauren Yelen (Chair of committee, completed degree 2008)
- 5. Sarah Barbrow (Chair of committee, completed degree 2009)
- 6. Michelle Lelli (Member of committee, completed degree 2009)
- 7. Jason Dobkowski (Chair of committee, completed degree 2012)
- 8. Katie Harrold (University of North Carolina, Member of committee, completed degree 2013)

- 9. Benjamin Miller (Chair of committee, completed degree 2014)
- 10. Aislinn Deely (Member of committee, completed degree 2018)

Ph.D. Students

Chair or Co-Chair of Committee:

- 1. Kimberly Schulz (Completed 1996). Professor, Syracuse University, NY.
- 2. Peder Yurista (1997). Research Scientist, EPA, Duluth, MN.
- 3. Mercedes Castillo (2000). Professor, National Council of Science and Technology, Chiapas, Mexico.
- 4. Tom Bridgeman (2001). Associate Professor, University of Toledo, OH.
- 5. Kristin Judd (2004). Associate Professor, University of Eastern Michigan, MI.
- 6. Katy Keller (2006). Research Scientist, Shell Oil Company, TX.
- 7. Mary Anne Evans (2007). Research Scientist, U.S. Geological Survey, Ann Arbor, MI.
- 8. Heather Adams (2009). Scientist, NEON.
- 9. Jasmine Crumsey (2014). Research Faculty, Lecturer, University of Georgia.
- 10. Karl Romanowicz (started 2017).

Member or Cognate Member of Committee:

- 1. Scott McNaught (completed degree 1993)
- 2. William Patterson (completed degree 1995)
- 3. Hilde Snoeckx (completed degree 1995)
- 4. Scott Peacor (completed degree 1999)
- 5. Tara Rajaniemi (completed degree 2001)
- 6. Andrew Jacobson (completed degree 2001)
- 7. Andrea Dutton (completed degree 2003)
- 8. Luis Schiesari (completed degree 2004)
- 9. Jared DeForest (completed degree 2004)
- 10. Haeguen Chung (completed degree 2005)
- 11. Michela Arnaboldi (completed degree 2005)
- 12. Darryl Hondorp (completed degree 2006)
- 12. Nia Paul (University of Yaounde, Cameroon, completed degree 2007)
- 13. Haejin Han (completed degree 2007)
- 14. Nate Bosch (completed degree 2007)
- 15. Paul Steen (completed degree 2007)
- 16. Lori Ivan (completed degree 2008)
- 17. Franek Hasiuk (completed degree 2008)
- 18. Maria Marcano (completed degree 2010)
- 19. Clay Cressler (completed degree 2010)
- 20. Dan Rucinski (completed degree 2013)
- 21. Beth Sparks-Jackson (completed degree 2014)
- 22. Karthik Anantharaman (completed degree 2014)
- 23. Collin Ward (completed degree 2015)
- 24. Ian Winkelstern (completed degree 2016)
- 25. Mary Catherine O'Leary
- 26. Adrianna Trusiak

- 27. Jennifer Bowen
- 28. Derek Smith
- 29. Wenbo Zhou
- 30. Kristel Sanchez

<u>Educational Outreach</u> (e.g., NSF-funded Research Experience for Teachers programs)

- 1. Randy Warrilow, NSF Research Experience for Teachers (RET) Fellow. Summer 2006.
- 2. Sally Cresido, NSF Research Experience for Teachers (RET) Fellow. Summer 2008.
- 3. Bruce Takerka, NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2013.
- 4. Regina Brinker. NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2014.
- 5. Lauren Watel. NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2014.
- 6. D. J. Kast. NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2016.
- 7. David Walker. NSF PolarTrec (Teachers and Researchers Exploring and Collaborating) Fellow. Fellowship held summer 2019.

Service (at the University of Michigan):

Department

2010	M 1 E 4' C '4 D 4 4 CE 1 1E 14' D'1
2019 –	Member, Executive Committee, Department of Ecology and Evolutionary Biology
2019	Member, Departmental Nominating Committee
2018	Chair, Tenure Review Panel
2015 - 2017	Member, EEB Graduate Affairs Committee
2013 - 2015	Chair, EEB Promotions and Merit Committee
2012 - 2013	Member, EEB Promotions and Merit Committee
2008 - 2011	Associate Chair, Department of Ecology and Evolutionary Biology
2010 - 2011	Chair, EEB Cluster position Search Committee, Microbial Ecology
2009 - 2010	Chair, EEB Microbial Ecologist Search Committee
2008 - 2009	Chair, EEB Microbial Ecologist Search Committee
2007	Member, EEB Promotions and Merit Committee
2005 - 2008	Chair, Ph.D. Preliminary Examination Standing Committee
2003 - 2004	Member, Department Executive Committee.
2001 - 2003	Member, Department Curriculum Committee.
2002 - 2003	Chair, Seminar Committee
2001 - 2002	Chair, Ph.D. Preliminary Examination Standing Committee.
2001	Chair, Committee to produce an EEB 5-year Plan
1999	Editor, Department's publication on "Graduate Studies in Biology"
1998 - 2000	Member, Department Executive Committee
1998 - 2000	· · · · · · · · · · · · · · · · · · ·
1998 – 1999	, ,
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1998	Editor, Department's publication on "Graduate Studies in Biology"
1998	Member, Introductory Biology Review Committee
1995 - 1997	Chair, Seminar Committee
1994 - 1995	Chair, Ph.D. Admissions Committee
1993 - 1994	Chair, Ph.D. Admissions Committee
1993	Member, Avian and Molluscan Biologist Search Committee
1993	Editor, Department's publication on "Graduate Studies in Biology"
1992 - 1993	Member, Ph.D. Admissions Committee

College and University

2019	Member, Promotion Evaluation Committee, School of Environment and Sustainability
2016	Member, Search Committee for a faculty position in the School of Natural Resources and the Environment
2015	Member, College Safety Committee, Literature, Science and the Arts
2015	Member, Search Committee for a faculty position in the School of Natural Resources
	and the Environment
2014 –	Member, Burroughs-Wellcome Training Grant, Microbiome Science, Program
	Advisory Committee
2013 –	Member, Center for Microbial Sciences, Steering Committee
2008 - 2017	Member, President's Microbial Ecology Cluster Hires, Steering Committee
2007 - 2008	Member, College of Literature, Science, Arts. Divisional Evaluation Committee for
	Promotion
2006 - 2007	Member, Office of the Vice President committee on the University of Michigan Great
	Lakes Initiative
2003 –	Faculty Associate, Program in the Environment (LSA & SNRE)
2002	Member, Search Committee for faculty position in School of Natural Resources and
	Environment (SNRE)
2000	Member, Office of the Vice President Search Committee to select an Associate Vice
	President for Research
1999 - 2003	Member of Executive Committee, University of Michigan Biological Station
1999	Member, Joint Committee of the College of Literature, Science, and Arts and the
	School of Natural Resources on establishing an Environmental Major on Campus
1998 - 2000	Member, President's Commission on Life Sciences at the University of Michigan
1996	Member, Office of the Vice President for Research Committee on Research
	Publications at the University of Michigan
1996 - 1997	Member, Provost's Committee on Environmental Studies at the University of
	Michigan (PAGE)
1995 – 1996	Member, Office of the Vice President for Research Committee on Aquatic and
	Environmental Research at the University of Michigan
1995 - 1997	Member, Oversight Committee on the move of the Center of Great Lakes and Aquatic
	Studies from North to Central Campus
1994 – 1998	Member, Great Lakes Seminar Committee (U of M, GLERL, CGLAS)
1993 – 1997	Member, Great Lakes Studies Council (Heads: Bill Kelly, Homer Neal, Vice
	Presidents for Research)