KEVIN C. ROSE

University of Wisconsin, Madison • Department of Zoology
250 N. Mills Street, Madison, WI 53706
Email: kev.c.rose@gmail.com
Cellular: (973) 919-4278 • Department: (608) 262-1051

EDUCATION

2011 Ph.D., Ecology, Evolution, and Environmental Biology
Miami University, Oxford, OH

2005 B.A., International Relations
Lehigh University, Bethlehem, PA

2004 B.S., Materials Science and Engineering
Lehigh University, Bethlehem, PA

POSITIONS HELD

2014-present Postdoctoral Associate
Department of Zoology, University of Wisconsin-Madison, Madison, WI

2012-2014 AAAS Science and Technology Policy Fellow
U.S. National Science Foundation, Arlington, VA

2011-2012 Smithsonian Postdoctoral Fellow
Smithsonian Environmental Research Center, Edgewater, MD

2009-2011 IGERT Trainee, EARS (Environmental Aquatic Resource Sensing) IGERT (Integrative Graduate Education and Research Traineeship) program, Miami University, Oxford, OH

2007-2009 Research Assistant, Department of Zoology
Miami University, Oxford, OH

2005-2007 Teaching Assistant, Department of Zoology
Miami University, Oxford, OH

PEER REVIEWED PUBLICATIONS (18 published, 2 in press, 5 in review)

Google Scholar Citation Profile

In review Baustian, M.M., G.J.A. Hansen, A. de Kluijver, K. Robinson, E.N. Henry, L.B. Knoll, **K.C. Rose** and C. Carey. Linking the bottom to the top in aquatic ecosystems: mechanisms and stressors of benthic-pelagic coupling. *Limnology and Oceanography (e-book chapter).*

In review Kissman, C.E.H., C.E. Williamson, **K.C. Rose**, and J.E. Saros. Terrestrial dissolved organic matter subsidies stabilize pelagic consumer:producer ratios. *Ecosystems*.

In review Read, J.S., E.L. Read, **K.C. Rose**, and L.A. Winslow. A method for estimating a bulk diffuse attenuation coefficient (K_d) from paired temperature sensors. *Limnology and Oceanography: Methods.*

In review **Rose, K.C.** D.P. Hamilton, C. McBride, C.E. Williamson, J.E. Saros, J.M. Fischer, M.G. Allan, M. Olson, and N. Cabrol. Light attenuation characteristics of glacially-fed lakes. *Journal of Geophysical Research: Biogeosciences.*

In review Strock, K.E., J. Brentrup, B. Hargreaves, L. Knoll, **K.C. Rose**, W. Gawley, A.C. Ellsworth, C.E. Williamson, and J.E. Saros. Regional coherence in lake response to environmental change: understanding changes in water transparency in the northeastern United States. *Limnology and Oceanography.*

In press **Rose, K.C.**, L. Winslow, J.S. Read, E.L. Kara, C.T. Solomon, R. Adrian, and P.C. Hanson. Improving the precision of lake ecosystem metabolism estimates by identifying predictors of parameter uncertainty. *Limnology and Oceanography: Methods.*

In press Williamson, C.E., J.A. Brentrup, J. Zhang, W.H. Renwick, B.R. Hargreaves, L.B. Knoll, E.P. Overholt, and **K.C. Rose**. Lakes as sensors in the landscape: Optical sentinels of climate change. *Limnology and Oceanography*.

2013 Weathers, K.C., P.C. Hanson, P. Arzberger, J. Brentrup, J. Brookes, C.C. Carey, E. Gaiser, D.P. Hamilton, G.S. Hong, B. Ibelings, V. Istvánovics, E. Jennings, B. Kim, T. Kratz, F.-P. Lin, K. Muraoka, C. O'Reilly, C. Piccolo, **K.C. Rose**, E. Ryder, and G. Zhu. The Global Lake Ecological Observatory Network (GLEON): The Evolution of grassroots network science. *Bulletin of the Ecological Society of America*.

2013 Read, J.S. and **K.C. Rose** Physical responses of small temperate lakes to changing dissolved organic carbon concentrations. *Limnology and Oceanography*, 58: 921-931.

2013 Kissman, C.E.H., C.E. Williamson, **K.C. Rose**, and J.E. Saros. Response of phytoplankton community to climate change: indirect effects of dissolved organic matter through nutrients and trophic forcing by zooplankton in an alpine lake. *Limnology and Oceanography*, 58: 867-880.

2013 Solomon, C.T., D.A. Brusewitz, D.C. Richardson, **K.C. Rose,** M.C. Van de Bogert, P. Hanson, T. Kratz, B. Larget, S. Carpenter, R. Adrian, B. Babin, C. Yu Chiu, E. de Eyto, C. Driscoll, D. Hamilton, E. Gaiser, S. Hendricks, V. Istvanovics, A. Laas, M. Pace, P.A. Staehr, T. Torgersen, M. Vanni, K. Weathers, and G. Zhu. Lake ecosystem respiration: drivers of daily variability and background respiration in systems around the globe. *Limnology and Oceanography*, 58:849-866.

2012 **Rose, K.C.**, C.E. Williamson, J. Fischer, M. Olson, S.J. Connelly, and A.J. Tucker. The Role of Fish and UV in Regulating the Vertical Distribution of *Daphnia*. *Limnology and Oceanography,* 57: 1867-1876.

2012 Read, J.S., D.P. Hamilton, A.R. Desai, **K.C. Rose**, S. MacIntyre, J.D. Lenters, R.L. Smyth, P.C. Hanson, J.J. Cole, P.A. Staehr, J.A. Rusak, D.C. Pierson, J.D. Brookes, A. Laas, and C.H. Wu. Lake-size dependency of wind shear and convection as controls on gas exchange. *Geophysical Research Letters, doi:10.1029/2012GL051886.*

2012 Pedersen, L., T. Smith, S. Lee, N. Cabrol, and **K. Rose**. Planetary Lake Lander – A Robotic Sentinel to Monitor a Remote Lake. *Lunar and Planetary Science Conference Proceedings*.

2012 Carey, C.C., P.C. Hanson, D.A. Bruesewitz, G.W. Holtgrieve, E.L. Kara, **K.C. Rose**, R.L. Smyth, and K.C. Weathers. Organized Oral Session 43. Novel Applications of High-frequency Sensor Data in Aquatic Ecosystems: Discoveries from GLEON, the Global Lakes Ecological Observatory Network. *Bulletin of the Ecological Society of America*, 100-105.

2012 Kara, E.L., P. Hanson, D. Hamilton, M.R. Hipsey, K.D. McMahon, J.S. Read, L. Winslow, J. Dedrick, **K.C. Rose**, C.C. Carey, S. Bertilsson, D da Motta Marques, L. Beversdorf, T. Miller, C. Wu, Y.-F. Hsieh, E. Gaiser, and T. Kratz. Time-scale dependence in numerical simulations: Assessment of physical, chemical, and biological predictions in a stratified lake at temporal from scales of hours to months. *Environmental Modelling & Software,* 35: 104-121.

2011 Fischer, J., M. Olson, C. Williamson, J. Everhart, J. Mack, **K. Rose**, R. Vinebrooke, J. Saros, and J. Stone. *Daphnia middendorffiana* as a sentinel of climate change in alpine lakes: evidence from spatial distribution, long-term dynamics, and experiments. *Hydrobiologia,* 676: 263-277.

2011 Williamson, C.E., **K.C. Rose**, A.J. Tucker, J.S. Mack, E.P. Overholt, J.E. Saros, J.M. Fischer, and J. C. Everhart. Water Transparency to UV Radiation as a Sentinel Response to Climate and Land-use Change: Implications for Aquatic Food Webs and Invasive Species. *Conference Proceedings of the October, 2010, 10th Biennial Scientific Conference on the Greater Yellowstone Ecosystem*.

2010 Williamson, C.E and **K.C. Rose**. When UV meets fresh water. *Science*, 329: 637-639.

2010 Saros, J.E., **K.C. Rose**, D.W. Clow, V.C. Stephens, A.B. Nurse, J.R. Stone, A.P. Wolfe, and C.E. Williamson. Melthing Alpine Glaciers Enrich High-Elevation Lakes with Nitrogen. *Environmental Science and Technology*, 44: 4891–4896.

2010 Tucker, A.J., C.E. Williamson, **K.C. Rose**, J.T. Oris, S.J. Connelly, M.H. Olson, and D.L. Mitchell. Ultraviolet Radiation affects invasibility of lake ecosystems by warmwater fish. *Ecology*, 91: 882-890.

2009 **Rose, K.C.**, C.E. Williamson, J.E. Saros, R. Sommaruga, and J. Fischer. Differences in UV transparency and thermal structure between alpine and subalpine lakes: Implications for organisms. *Photochemical and Photobiological Sciences*, 8: 1244-1256.

2009 **Rose, K.C.**, C.E. Williamson, S.G. Schladow, and M.W. Winder. Spatial and Temporal Patterns of UV Transparency in Lake Tahoe, California-Nevada. *Journal of Geophysical Research, Biogeosciences 114,* G00D03, DOI: 10.1029/2008JG000816.

2009 Winn, N.T., C.E. Williamson, R. Abbitt, **K.C. Rose**, W. Renwick, M. Henry, and J. Saros. Modeling Dissolved Organic Carbon (DOC) in alpine and subalpine lakes with GIS and Remote Sensing. *Landscape Ecology,* DOI: 10.1007/s10980-009-9359-3.

2009 Williamson, C.E. and **K.C. Rose**. Ultraviolet Insights: Attempting to Resolve Enigmatic Patterns in Pelagic Freshwaters – The Historical Context and a View to the Future. *International Review of Hydrobiology*, 94: 129-142.

AWARDS AND EXTERNAL FUNDING (total funding to date: $555,343)

2013-2015 "Development of real-time environmental sensor technology and applications for the northeast: A proposal from the NERC northeastern environmental sensor working group (NESN)." Funding by the Northeast States Research Cooperative (NSRC), I participate as a Co-PI; lead PI: Lindsey Rustad (US Forest Service, Maine). Other co-PIs include M. Martin (U. New Hampshire), J. Shanley (USGS, Vermont), and K. Weathers (Cary Institute for Ecosystem Studies, New York) ($65,648)

2012-2014 American Association for the Advancement of Science (AAAS), Science and Technology Policy Fellowship ($175,000)

2006-2013 GLEON (Global Lake Ecological Observatory Network) meeting travel awards to Lammi, Finland; Lake Placid, Florida; Norrtalje, Sweden; Hamilton, New Zealand; Wisconsin, USA; Torres, Brazil; Lake Kinneret, Israel; New Hampshire, USA; Westport, Ireland; Bahia Blaca, Argentina (total $14,500)

2012 Eco-DAS X (Ecological Dissertations in Aquatic Sciences, formerly DIALOG) symposium participant. ($2,500)

2011-2012 Smithsonian Institution postdoctoral fellowship proposal, "Modeling dissolved organic matter (DOM) dynamics in the Rhode River sub-estuary and its role in the Chesapeake Bay" ($122,000)

2011 "Advanced Aquatic Sensors" workshop grant, US National Science Foundation; with K. Nadelhoffer (lead PI), S. Hendricks, S. Tilak, K. Kwaiser, and H. Purcell ($44,020)

2011 U.S. Department of State (Bureau of Citizen Exchanges) "Across Borders" fellowship to study international water rights and conflicts in Israel, Jordan, Egypt, and West Bank, 2011. Declined fellowship due to travel conflicts. ($15,000)

2009-2011 NSF IGERT (Integrative Graduate Education and Research Traineeship) ($81,000)

2009 Miami University Dissertation Fellowship. This highly selective award is presented to a small number of outstanding Miami doctoral students. Declined funding in order to accept NSF IGERT traineeship. ($16,975)

2009 Miami University Graduate Students' Achievement Fund, 2009 [max. award: $300] ($300)

2006-2009 Miami University Dept. of Zoology awards for summer field research ($13,100)

2008	Sigma Xi grant-in-aid of research, award for research on lake carbon cycling ($500)
2008	Travel fellowship to attend American Geophysical Union (AGU) Chapman Conference on climate and lakes, Lake Tahoe, CA/NV, USA ($1,250)
2006-2010	Miami University Graduate School Travel Awards ($1250)
2006-2010	Miami University Graduate Student Association Travel Awards ($500)
2006-2010	Miami University Dept. of Zoology Graduate Enrichment Fund Travel Awards ($1600)
2002	2nd place, International Metallography Contest, ASM International ($200)
2000	Eagle Scout, Boy Scouts of America

INVITED TALKS & PRESENTATIONS

2014	Clarity and carbon cycling: the dual role of dissolved organic carbon in inland waters. The University of Maine Climate Change Institute.
2014	Where are they now? Recent IGERT graduates in the workplace. Panel discussion on career options for IGERT students. University of Maine IGERT program.
2013	Terrestrial Water Cycle Cluster Inter-agency Working Group: updates and future plans. Coauthors: T. Torgersen, and P. Stephens. United States Global Change Research Program (USGCRP) annual meeting, Washington, D.C.
2012	GLEON and global water management. Public plenary panel discussion at the Global Lake Ecological Observatory Network (GLEON) 14 meeting, Westport, Ireland.
2012	An Introduction to the National Ecological Observatory Network (NEON). Lacawac Ecological Observatory Workshop, Lake Ariel, PA.
2012	Sensor technologies and selection for aquatic research. Lacawac Ecological Observatory Workshop, Lake Ariel, PA.
2011	An introduction to GLEON and overview of advanced aquatic sensors. Advanced Aquatic Sensors Workshop, University of Michigan Biological Station, Pellston, MI.
2011	Understanding allochthony: New tools and techniques. Coauthors: C.E. Williamson, J.E. Saros and C.E.H. Kissman. Ecological Society of America (ESA) meeting, Austin Texas. August 2011. Invited by session organizers.
2011	New tools for quantifying carbon cycling in aquatic ecosystems. Coauthor: and C.E. Williamson. Annual pan-IGERT Meeting, Washington, D.C.

2010 The EARS IGERT program: new sensors and technologies. Coauthor: C.E. Williamson. Annual pan-IGERT Meeting, Washington, D.C.

2007 Ultraviolet radiation (UVR) transparency of Lake Tahoe CA/NV: Using UVR as an indicator of lake dynamics. Coauthor: C.E. Williamson. Global Lake Ecological Observatory Network (GLEON) 6 Meeting, Lammi Biological Station, Finland.

CONTRIBUTED TALKS & PRESENTATIONS (*only lead presentations included*)

2014 Rose, K.C. Water clarity in Wisconsin lakes (and beyond). Center for Limnology seminar series, University of Wisconsin-Madison, Madison. Oral presentation.

2012 Rose, K.C., N. Cabrol, L. Pedersen, T. Smith, and S. Lee. Planetary Lake Lander: Deglaciation and the evolution of planetary lake habitability. Global Lake Ecological Observatory Network (GLEON) 14 Meeting, Westport, Ireland. Oral presentation.

2012 Rose, K.C., and C. Carey. Dissolved organic carbon, cyanobacterial blooms, and climate change: feedbacks and interactions. Eco-DAS Symposium, Oahu, Hawai'i. Oral presentation.

2012 Rose, K.C., Neale, P.J*., and M. Tzortziou. Spatial, spectral, and long term trends in attenuation in the Rhode River sub-estuary of the Chesapeake Bay. Coastal and Estuarine Research Federation (CERF) meeting, Mar Del Plata, Argentina. Oral presentation. *presented by PJ Neale

2012 Rose, K.C., Neale, P.J., and M. Tzortziou. Modeling attenuation across the UV-PAR spectrum in the Rhode River sub-estuary. Chesapeake Bay Modeling Symposium, Annapolis, MD. Oral presentation.

2011 Rose, K.C., Read, J.S., McBride, C., C.E. Williamson, and D. Hamilton. Deep Chlorophyll Maxima: Where do they form and what implications do they have for ecosystem structure and metabolism estimates? Global Lake Ecological Observatory Network (GLEON) 13 Meeting, New Hampshire. Oral presentation.

2011 Rose, K.C., Winslow, L., Read, J., and Kara, E. Improvements in Whole Ecosystem Metabolism: Integrating Physics into biological dissolved oxygen models. Global Lake Ecological Observatory Network (GLEON) 12 Meeting, Ramot, Israel. April 2011. Poster presentation.

2011 Rose, K.C. Understanding physical constraints on the vertical structure of CDOM and Chlorophyll. Global Lake Ecological Observatory Network (GLEON) 12 Meeting, Ramot, Israel, Poster presentation.

2010 Rose, K.C., Winslow, L., Read, J., and Kara, E*. The Role of Lake Physics in Regulating Lake Metabolism across GLEON. Global Lake Ecological Observatory Network (GLEON) 11 Meeting, Nanjing, China. Poster presentation. *presented by E. Kara.

2010 Rose K.C., Wiliamson C.E., Saros J.E., and C.E.H. Kissman. What can dissolved absorbance tell us about lake ecology? Global Lake Ecological Observatory Network (GLEON) Meeting 10, Torres, Brazil. Poster presentation.

2010 Rose K.C. Distilling Free-form Ecological Insights from High Frequency Data. Global Lake Ecological Observatory Network (GLEON) Meeting 10, Torres, Brazil. Oral presentation.

2010 Rose K.C., Williamson C.E., Saros J.E., and C.E.H. Kissman. Indicators of Allochthony. American Society for Limnology and Oceanography (ASLO) Conference, New Mexico, USA. Poster presentation.

2009 Rose K.C., Williamson C.E., and J.E. Saros. Transparency patterns of high elevation lakes in the Beartooth Moutains, MT/WY, USA. Global Lake Ecological Observatory Network (GLEON) Meeting 8, New Zealand. Poster presentation.

2008 Rose K.C., Williamson C.E., and J.E. Saros. The development of an optical indicator of allochthony in low DOM lakes. Global Lake Ecological Observatory Network (GLEON) 7 Meeting, September-October 2008, Uppsala University, Norrtalje, Sweden. Poster presentation.

2008 Rose K.C., Williamson C.E., and J.E. Saros. The development of an optical indicator of allochthony in low DOM lakes. "Lakes and reservoirs as sentinels, integrators, and regulators of climate change" AGU Chapman Conference, Nevada. Poster presentation.

2008 Rose K.C., Williamson C.E., Fischer J.M., Olson M.H., Connelly S.J., Tucker A., and E. Overholt. The role of fish and ultraviolet radiation in stimulating zooplankton migration. American Society of Limnology and Oceanography (ASLO) Conference, Orlando, Florida. Poster presentation.

2008 Rose K.C., Williamson C.E., and J.E. Saros. Adding UV Transparency as an Optical Indicator of Allochthony in Low DOM Lakes. Global Lake Ecological Observatory Network (GLEON) Meeting 6, Lake Placid, Florida. Poster presentation.

2007 Rose K.C, Williamson C.E., Tucker A.J., Oris J.T., and M. Winder. 2007. Seasonal and spatial variation in ultraviolet radiation transparency of Lake Tahoe, USA. American Society of Limnology and Oceanography (ASLO) Conference, Santa Fe, New Mexico, USA. Oral presentation.

TEACHING EXPERIENCE

2013 Lecturer, Limnology field course
Field program through University of Nevada, Reno and University of California, Davis
Lectured on limnology, high frequency sensors, and watershed management in a field course at Lake Atitlán, Guatemala to a class of 25 undergraduate students. Responsibilities included developing curriculum, preparing and presenting lectures, and field training.

2010 Lecturer, Capstone: Contemporary Issues – Ecosystem Disturbance
Miami University, Oxford, OH

Lectured on global environmental change topics including carbon cycling and climate change to senior undergraduate capstone class.

2009-2010 Organizer and Instructor, Graduate Seminar, "Communicating Science with the Public"
Miami University, Oxford, OH
Initiated, organized, and facilitated this graduate student seminar. Responsibilities included developing the syllabus, leading weekly seminars, organizing guest lectures by subject matter experts, and grading.

2008 Lecturer, Ecology
Miami University, Oxford, OH
Lectured on ecological topics including global biogeochemical cycles (e.g., carbon, phosphorus, and nitrogen), pollution, temperature, water, and climate change to two large classes (>40 students) over four weeks.

2006-2007 Instructor, Honors Introductory Biology (Course 1 of 2)
Miami University, Oxford, OH
Instructed and led laboratory assignments in this first of a series of introductory laboratory classes for honors students majoring in Botany, Microbiology, and/or Zoology. Responsibilities included developing lesson plans and new labs, creating, giving, and grading exams and quizzes, and instructing/giving lectures.

2006-2007 Instructor, Honors Introductory Biology (Course 2 of 2)
Miami University, Oxford, OH
Instructed and led laboratory assignments in this second of a series of introductory laboratory classes for honors students majoring in Botany, Microbiology, and/or Zoology. Responsibilities included developing lesson plans and new labs, creating, giving, and grading exams and quizzes, and instructing/giving lectures.

2005-2006 Instructor, Introductory Biology (Course 1 of 2)
Miami University, Oxford, OH, USA
Instructed and led laboratory assignments in this first of a series of introductory laboratory classes for students majoring in Botany, Microbiology, and/or Zoology. Responsibilities included developing lesson plans and new labs, creating, giving, and grading exams and quizzes, and instructing/giving lectures.

2005-2006 Instructor, Introductory Biology (Course 2 of 2)
Miami University, Oxford, OH, USA
Instructed and led laboratory assignments in this second of a series of introductory laboratory classes for students majoring in Botany, Microbiology, and/or Zoology. Responsibilities included developing lesson plans and new labs, creating, giving, and grading exams and quizzes, and instructing/giving lectures.

UNDERGRADUATES ADVISED

2013 Joaquin Arango (Universidad Rafael Landívar)*
2013 Mafer Rivas (Universidad Rafael Landívar)*
2013 Mónica Martínez (Universidad de San Carlos de Guatemala)*
2013 David Coroxon (Universidad del Valle de Guatemala)*

2012 Asha Jordan (Bucknell University) *^
2009-2010 Cody Green (Miami University) *, +
2008 Samuel Lee (Miami University) *, +
2007-2008 Ashley Frericks (Miami University) *
2007 Tiffany Tisler (Miami University) *
2006-2007 R. Steven Gerhard (Miami University) *

* presented research publicly (e.g., at Miami University's Undergraduate Research Forum)
^ awarded prestigious Smithsonian undergraduate internship, which provides stipend and research funds
+ awarded prestigious Miami University Undergraduate Summer Scholarship, which provided stipend, travel, and research funds.

INVITED WORKSHOP PARTICIPATION

2013 *Organizer*, Belmont Forum Data and E-infrastructures Knowledge Hub Steering Committee meeting. London, U.K., October 2013.

2013 *Participant and Presenter*, U.S. Global Change Research Program: Indicators of Climate Change workshop. USGCRP Headquarters, Washington, D.C., September 2013.

2012 *Participant,* "Communicating Science," Global Lake Ecological Observatory Network (GLEON) 14 meeting, Westport, Ireland, October 2012.

2012 *Participant,* U.S. Global Change Research Program (USGCRP) planning workshop. National Science Foundation, Arlington, Virginia, September 2012.

2012 *Presenter*, "Planetary Lake Lander: Research planning workshop," NASA Ames Research Center, Moffet Field, California, August 2012.

2012 *Co-organizer and Presenter*, "Lacawac Ecological Observatory Workshop," Lacawac Sanctuary, Lake Ariel, PA, June 2012.

2011 *Participant*, "Field Station and Marine Lab Planning Workshop," Colorado Springs, CO, November, 2011.

2011 *Participant*, "Northeastern Ecosystem Research Cooperative Sensor Workshop," Hubbard Brook Experimental Forest, New Hampshire, October, 2011.

2011 *Co-organizer and Instructor*, "Advanced Aquatic Sensors," University of Michigan Biological Station, Pellston, MI, September 2011.

2011 *Participant*, "Introduction to Lakebase: VADER, Lakebase, and more," sponsored by GLEON, Ramot, Israel, April 2011.

2010 *Co-organizer*, "Introduction to Hydrodynamics," sponsored by GLEON, Torres, Brazil, May 2010.

2009 *Co-organizer*, "Physical Limnology," sponsored by GLEON, Boulder Junction, WI, October 2009.

2009 *Co-organizer*, "Model your Lake," sponsored by GLEON, University of Waikato, Hamilton, New Zealand, February 2009.

2008 *Co-organizer and Instructor*, "How to Manage GLEON Data," sponsored by GLEON, Norr Malma Field Station, Norrtalje, Sweden, Ocober, 2008.

PROFESSIONAL SERVICE SUMMARY

2014- United Nations Environment Programme Environmental Effects Assessment Panel member

2013- *Working Group Member,* U.S. National Climate Assessment, Water Cycle Indicators Group and Freshwater Indicators Group. I also serve as a reviewer for the National Climate Assessment.

2013- *Member*, GLEON (Global Lake Ecological Observatory Network) Steering Committee (renewable term runs 2013-2016)

2013- 2014 *Working Group Member*, U.S. Global Change Research Program (USGCRP) clusters: Carbon Cycling, Biogeochemistry, Terrestrial Water Cycle, Ecosystems

2012-2014 *Workshop co-organizer*, "Lacawac Ecological Observatory Workshop" held in June of each year, Lacawac Santuary, Lake Ariel, PA.

2013 *Session organizer*, ASLO conference, "Assessing vulnerability of lakes and reservoirs to climate change." February, 2013, New Orleans, LA.

2012 *Presenter and moderator*, public discussion panel on "GLEON and Global Water Issues" at GLEON 14 meeting in Westport, Ireland.

2012 *Session organizer*, Chesapeake modeling symposium, "Measuring and modeling biogeochemical cycles at land-estuarine interfaces: Current status, needed improvements, and applications to decision making and estuarine resource management." May 2012, Annapolis, MD.

2011-present *Member*, National Ecological Observatory Network (NEON) Aquatic Technical Working Group (ATWG) and Aquatic Instrument Working Group (AIWG).

2007-2010 *Chair/co-chair*, GLEON (Global Lake Ecological Observatory Network) Student Association.

2008-2012 *Member,* GLEON RCN (Research Coordination Network) Steering Committee

2009-2010 *Member,* GLEON program committees (for meetings in New Zealand, Wisconsin, and Brazil)

2009 *Invited presenter*, NSF booth (on topic of lakes, climate, and water quality) at AAAS conference, February 2009, Chicago, IL, USA.

2008-2011 *Member*, Dept. of Zoology Graduate Student Advisory Board

2009-2011 *Graduate Student Representative*, Dept. of Zoology Faculty meetings.

2009-present *Reviewer,* Astrobiology, Global Change Biology, Canadian Journal of Fisheries and Aquatic Sciences, Ecosystems, Hydrobiologia, Journal of Geophysical Research-Atmospheres, Lakes and Reservoirs: Research and Management, the Journal of Water and Climate, Aquatic Sciences, Photochemistry and Photobiological Sciences, and PLOS One.

OUTREACH ACTIVITIES SUMMARY

2012-present *Science Writer*, Environmental Monitor magazine and ecology news service.
Published a range of articles on emerging environmental topics and high impact news stories.

2010-2012 *Scientific & Technical Editor*, "Lake Scientist".
Site is a tool for teachers, students, scientists, and the public where top water quality and lake science and technology news and issues are presented.

2009-2011 Filmed and narrated videos on water quality and field research at Miami University, including opportunities for undergraduates and K-12 teachers. Content online at: http://www.cas.muohio.edu/studentresearch.html

2009-2012 Worked with journalists and university press office resulting in articles in media outlets such as IndiaOne (a newspaper in India), the Lakeland Times (a newspaper in Lakeland, Wisconsin), and Highlands Today (a newspaper in Lake Placid, Florida).

2009-2010 Published photography on research, including cover photo for Photochemistry and Photobiological Sciences (Issue 9, 2009), Lake Scientist (website) and Smithsonian Institution online nature series.

2010 Provided scientific input for filming of Discovery Channel documentary on life in extreme habitats while on NASA sponsored research expedition (show, "Are We Alone?" aired in 2010).

2006-2009 Presented in an annual series of public seminars on carbon cycling, transparency, zooplankton, sensors in ecology, and long distance backpacking.

2009 Developed graduate student ecology outreach program through which students enrolled in my "Communicating Science with the Public" class wrote articles for popular media outlets. Wrote an article on alpine lakes and water quality as part of this program which was published in *Environmental Monitor*.

PROFESSIONAL MEMBERSHIPS

Member, ASLO (Association for the Sciences of Limnology and Oceanography)
Member, AAAS (American Association for the Advancement of Science)
Member, AGU (American Geophysical Union)
Member, GLEON (Global Lakes Ecological Observatory Network)