

## CURRICULUM VITAE

**Evelyn E. Gaiser**

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### EDUCATION

- Ph.D.** 1997 University of Georgia, Athens, Georgia, Institute of Ecology  
**M.S.** 1991 Iowa State University, Ames, Iowa, Department of Animal Ecology  
**B.S.** 1989 Kent State University, Kent, Ohio, Department of Biology

### ACADEMIC AND PROFESSIONAL APPOINTMENTS

- 2012 – Present:** Professor. Biological Sciences, Florida International Univ., Miami, FL  
**2006 – 2012:** Associate Professor. Biological Sciences, Florida International Univ., Miami, FL  
**2008 – Present:** Research Associate. Archbold Biological Station, Lake Placid, FL  
**2001 – 2006:** Assistant Professor. Biological Sciences, Florida International Univ., Miami, FL  
**1997 – 2001:** Assistant Research Scientist. Southeast Environ. Research Ctr., FIU, Miami, FL  
**1991 – 1997:** Research/Teaching Assistant. Institute of Ecology, University of Georgia, Athens, GA and Savannah River Ecology Lab, Aiken, SC  
**1989 – 1991:** Research/Teaching Assistant. Department of Animal Ecology, Iowa State University, Ames, IA and Iowa Lakeside Laboratory, Milford, IA  
**1987 – 1988:** Research Technician. OARDC, Ohio State University, Wooster, OH

### PUBLICATIONS

#### Refereed Publications:

- Gaiser, E., P. Sullivan, F. A. C. Tobias, A. J. Bramburger, and J. C. Trexler.** In Press. Boundary effects on benthic microbial phosphorus concentrations and diatom beta diversity in a hydrologically-modified, nutrient-limited wetland. *Wetlands* DOI 10.1007/s13157-013-0379-z.
- Koch, G. R., S. Hagerthey, D. L. Childers, and E. Gaiser.** In Press. Examining seasonally pulsed detrital transport in the coastal Everglades using a sediment tracking technique. *Wetlands* DOI 10.1007/s13157-013-0388-y.
- Sokol, E., J. M. Hoch, E. Gaiser and J. Trexler.** In Press. Metacommunity structure along resource and disturbance gradients in Everglades wetlands. *Wetlands* DOI 10.1007/s13157-013-0413-1.

- Sullivan, P. L., R. M. Price, J. L. Schedlbauer, A. Saha and E. **Gaiser**. In Press. The influence of hydrologic restoration on groundwater-surface water interactions in a karst wetland, Everglades (FL, USA). *Wetlands* DOI 10.1007/s13157-013-0451-8.
- Troxler, T., E. **Gaiser**, J. Barr, J. Fuentes, R. Jaffe, D. Childers, L. Collado-Vides, V. Rivera-Monroy, E. Castañeda-Moya, W. Anderson, R. Chambers, M. Chen, C. Coronado-Molina, S. Davis, V. Engel, C. Fitz, J. Fourqurean, T. Frankovich, J. Kominoski, C. Madden, S. Malone, S. Oberbauer, P. Olivas, J. Richards, C. Saunders, J. Schedlbauer, F. Sklar, T. Smith, J. Smoak, G. Starr, R. Twilley, and K. Whelan. 2013. Integrated carbon budget models for the Everglades terrestrial-coastal-oceanic gradient: current status and needs for inter-site comparisons. *Oceanography* 26: 98-107.
- Anderson, W., and E. **Gaiser**. 2013. Understanding paleoenvironmental change in Everglades wetlands. *Journal of Paleolimnology* 49: 1-3.
- Abbey-Lee, R. N., E. E. **Gaiser**, and J. C. Trexler. 2013. Relative roles of dispersal dynamics and competition in determining the isotopic niche breadth of a wetland fish. *Freshwater Biology* 58: 780-792.
- Solomon, C. T., D. A. Bruesewitz, D. C. Richardson, K. C. Rose, M. C. Van de Bogert, P. C. Hanson, T. K. Kratz, B. Larget, R. Adrian, B. L. Babin, C. Hiu, D. P. Hamilton, E. E. **Gaiser**, S. Hendricks, V. Istvánovics, A. Laas, D. M. O'Donnell, M. L. Pace, E. Ryder, P. A. Staehr, T. Torgersen, M. J. Vanni, K. C. Weathers, and G. Zhu. 2013. Ecosystem respiration: drivers of daily variability and background respiration in lakes around the globe. *Limnology and Oceanography* 58: 849-866.
- Wachnicka, A., E. **Gaiser**, L. Wingard, H. Briceño and P. Harlem. 2013. Impact of late Holocene climate variability and anthropogenic activities on Biscayne Bay (Florida, U.S.A): evidence from diatoms. *Palaeogeography, Palaeoclimatology, Palaeoecology* 371: 80-82.
- Lee, S., E. **Gaiser**, and J. Trexler. 2013. Diatom-based models for inferring hydrology and periphyton abundance in a subtropical karstic wetland: Implications for ecosystem-scale bioassessment. *Wetlands* 33: 157-173.
- Wachnicka, A., E. **Gaiser** and L. Collins. 2013. Correspondence of historic salinity fluctuations in Florida Bay, USA, to atmospheric variability and anthropogenic changes. *Journal of Paleolimnology* 49:103-115.
- Wachnicka, A., L. Collins and E. **Gaiser**. 2013. Response of diatom assemblages to 130 years of environmental change in Florida Bay (USA). *Journal of Paleolimnology* 49: 83-101.
- Sanchez, C., E. **Gaiser**, C. Saunders, A. Wachnicka and N. Oehm. 2013. Exploring siliceous microfossils as a tool for inferring past water level and hydroperiod in Everglades marshes. *Journal of Paleolimnology* 49:45-66.
- Quillen, A., E. **Gaiser** and E. Grimm. 2013. Diatom-based paleolimnological reconstruction of regional climate and local land-use change from a protected sinkhole lake in southern Florida, U.S.A. *Journal of Paleolimnology* 49:15-30.
- Bramburger, A., J. Munyon and E. **Gaiser**. 2013. Water quality and wet season diatom assemblage characteristics from the Tamiami Trail pilot swales sites. *Phytotaxa* 127: 163-182.
- Schedlbauer, J., J. Munyon, S. Oberbauer, E. **Gaiser**, G. Starr. 2012. Controls on ecosystem carbon dioxide exchange in short- and long-hydroperiod Florida Everglades freshwater marshes. *Wetlands* 32:801-812.

- La Hée, J. and E. **Gaiser**. 2012. Benthic diatom assemblages as indicators of water quality in the Everglades and three tropical karstic wetlands. *Freshwater Science* 31: 205-221.
- Dunalska, J., D. Górniak, B. Jaworska, and E. **Gaiser**. 2012. Effects of temperature on organic matter transformation in tropically-diversified lake ecosystems. *Ecological Engineering* 49: 27-34.
- Dodds, W., C. Robinson, E. **Gaiser**, G. Hansen, H. Powell, J. Smith, N. Morse, S. Gregory, T. Bell, T. Kratz, and W. McDowell. 2012. Surprises and insights from long-term aquatic data sets. *BioScience* 62:709-721.
- Wozniak, J. R., D. L. Childers, W. T. Anderson, E. E. **Gaiser**, D. T. Rudnick, and C. J. Madden. 2012. Potential N processing by southern Everglades freshwater marshes: Are Everglades marshes passive conduits for nitrogen? *Estuarine and Coastal Shelf Science* 96: 60-68.
- Kara, E., P. Hanson, D. Hamilton, M. Hipsey, K. McMahon, J. Read, L. Winslow, J. Dedrick, K. Rose, C. Carey, S. Bertilsson, D. Motta-Marques, L. Beversdorf, T. Miller, C. Wu, Y-F Hsieh, E. **Gaiser** and T. Kratz. 2012. Time-scale dependence in numerical simulations: Assessment of physical, chemical, and biological predictions in a stratified lake at temporal scales from hours to months. *Environmental Modelling and Software* 35: 104-121.
- Koch, G., D. Childers, P. Staehr, R. Price, S. Davis and E. **Gaiser**. 2012. Hydrological conditions control P loading and aquatic metabolism in an oligotrophic, subtropical estuary. *Estuaries and Coasts* 35: 292-307.
- Jennings, E., S. Jones, L. Arvola, P. A. Staehr, E. **Gaiser**, I. D. Jones, K. C. Weathers, G. A. Wyhenmeyer, C-Y. Chiu, and E. de Eyto. 2012. Impacts of weather related events in lakes: an analysis based on high frequency data. *Freshwater Biology* 57: 589-601.
- Sargeant, B., E. **Gaiser** and J. Trexler. 2011. Indirect and direct controls of macroinvertebrates and small fish by abiotic factors and trophic interactions in the Florida Everglades. *Freshwater Biology* 56: 2334-2346.
- Read, J., D. Hamilton, I. Jones, K. Muraoka, R. Kroiss, C. Wu and E. **Gaiser**. 2011. "Lake Analyzer": An automated program suite for the rapid analysis of high-resolution instrumented lake buoy data. *Environmental Modelling and Software* 26: 1325-1336.
- Gaiser**, E., P. McCormick and S. Hagerthey. 2011. Landscape patterns of periphyton in the Florida Everglades. *Critical Reviews in Environmental Science and Technology* 41(S1): 92-120.
- Hagerthey, S., B. Bellinger, K. Wheeler, M. Gantar and E. **Gaiser**. 2011. Everglades periphyton: A biogeochemical perspective. *Critical Reviews in Environmental Science and Technology* 41(S1): 309-343.
- Liu, G., M. Naja, P. Kalla, D. Scheidt, E. **Gaiser** and Y. Cai. 2011. Legacy and fate of mercury and methylmercury in the Florida Everglades. *Environmental Science and Technology* 45: 496-501.
- Gaiser**, E., J. La Hée, F. Tobias and A. Wachnicka. 2010. *Mastogloia smithii* Thwaites ex Wm. Smith: A structural engineer of calcareous mats in karstic subtropical wetlands. *Proceedings of the Academy of Natural Sciences, Philadelphia* 160: 99-112.
- Wachnicka, A., E. **Gaiser** and J. Boyer. 2010. Autecology and distribution of diatoms in Biscayne Bay, Florida (USA): implications for biomonitoring and paleoenvironmental studies. *Ecological Indicators* 11: 622-632.

- Wachnicka, A., E. **Gaiser**, L. Collins, T. Frankovich and J. Boyer. 2010. Distribution of diatoms and development of diatom-based inferences of environmental change in Florida Bay and adjacent coastal wetlands of South Florida. *Estuaries and Coasts* 33: 1080-1098.
- Sargeant, B., J. Trexler and E. **Gaiser**. 2010. Biotic and abiotic determinants of intermediate-consumer trophic diversity in the Florida Everglades. *Marine and Freshwater Research* 61: 11-22.
- Gaiser**, E., N. Deyrup, R. Bachmann, L. Battoe and H. Swain. 2009. Multidecadal climate oscillations detected in a transparency record from a subtropical Florida lake. *Limnology and Oceanography* 54: 2228–2232.
- Gaiser**, E., R. Bachmann, L. Battoe, N. Deyrup and H. Swain. 2009. Effects of climate variability on transparency and thermal structure in subtropical, monomictic Lake Annie, Florida. *Fundamental and Applied Limnology* 175: 217-230.
- Gaiser**, E. 2009. Periphyton as an indicator of restoration in the Everglades. *Ecological Indicators* 9: S37-S45.
- Frankovich, T., A. Armitage, A. Wachnicka, E. **Gaiser** and J. Fourqurean. 2009. Nutrient effects on seagrass epiphyte community structure in Florida Bay. *Journal of Phycology* 45: 1010-1020.
- Gaiser**, E., R. Doren, P. McCormick, S. Newman, J. Richards and J. Trexler. 2008. Comment on “Estimating Ecological Thresholds for Phosphorus in the Everglades.” *Environmental Science and Technology* 42: 6770-6771.
- Liu, G., Y. Cai, P. Kalla, D. Scheidt, J. Richards, L. Scinto, E. **Gaiser** and C. Appleby. 2008. Mercury mass budget estimates and cycling seasonality in the Florida Everglades. *Environmental Science and Technology* 42: 1954-1960.
- Wachnicka, A. and E. **Gaiser**. 2007. Morphological characterization of *Amphora* and *Seminavis* (Bacillariophyceae) from South Florida, U.S.A. *Diatom Research* 22: 387-455.
- Tobias, F. and E. **Gaiser**. 2006. Taxonomy and distribution of taxa in the genus *Gomphonema* from the Florida Everglades, U.S.A. *Diatom Research* 21: 379-405.
- Trexler, J., E. **Gaiser** and D. Childers. 2006. Interaction of hydrology and nutrients in controlling ecosystem function in oligotrophic coastal environments of South Florida. *Hydrobiologia* 569: 1-2.
- Gottlieb, A., J. Richards and E. **Gaiser**. 2006. Comparative study of periphyton community structure in long and short hydroperiod Everglades marshes. *Hydrobiologia* 569: 195-207.
- Gaiser**, E., A. Zafiris, P. Ruiz, F. Tobias and M. Ross. 2006. Tracking rates of ecotone migration due to salt-water encroachment using fossil mollusks in coastal south Florida. *Hydrobiologia* 569: 237-257.
- Frankovich, T., E. **Gaiser**, J. Zieman and A. Wachnicka. 2006. Spatial and temporal distributions of epiphytic diatoms growing on *Thalassia testudinum* Banks ex König: relationships to water quality. *Hydrobiologia* 569: 259-271.
- Dorn, N., J. Trexler and E. **Gaiser**. 2006. Exploring the role of large predators in marsh food webs: evidence for a behaviorally-mediated trophic cascade. *Hydrobiologia* 569: 375-386.
- Thomas, S., E. **Gaiser** and F. Tobias. 2006. Effects of shading on calcareous benthic periphyton in a short-hydroperiod oligotrophic alkaline wetland (Everglades, FL, U.S.A.). *Hydrobiologia* 569: 209-221.

- Ewe, S., E. **Gaiser**, D. Childers, V. Rivera-Monroy, D. Iwaniec, J. Fourquerean and R. Twilley. 2006. Spatial and temporal patterns of aboveground net primary productivity (ANPP) in the Florida Coastal Everglades LTER (2001-2004). *Hydrobiologia* 569: 459-474.
- Xu, Y., A. Wachnicka, E. **Gaiser** and R. Jaffé. 2006. Occurrence of C<sub>25</sub> highly branched isoprenoids in Florida Bay: Paleoenvironmental indicators of diatom-derived organic matter. *Organic Geochemistry* 37: 728-739.
- Thomas, S., E. **Gaiser**, M. Gantar and L. Scinto. 2006. Quantifying the responses of calcareous periphyton crusts to rehydration: A microcosm study (Florida Everglades). *Aquatic Botany* 84: 317-323.
- Gaiser**, E., J. Richards, J. Trexler, R. Jones and D. Childers. 2006. Periphyton responses to eutrophication in the Florida Everglades: Cross-system patterns of structural and compositional change. *Limnology and Oceanography* 51: 617-630.
- Davis, S., E. **Gaiser**, W. Loftus and A. Huffman. 2005. Southern marl prairies conceptual ecological model. *Wetlands* 25: 821-831.
- Gaiser**, E., K. Rosenfeld, D. Ebert-May, E. Weber and A. McConney. 2005. Pathways to Scientific Teaching: Here today, not gone tomorrow? Understanding extinction. *Frontiers in Ecology and the Environment* 7: 452-453.
- Gottlieb, A., J. Richards and E. **Gaiser**. 2005. The effects of desiccation resistance and rewetting on the community structure of Everglades periphyton. *Aquatic Botany* 82: 99-112.
- Gaiser**, E., J. Trexler, J. Richards, D. Childers, D. Lee, A. Edwards, L. Scinto, K. Jayachandran, G. Noe and R. Jones. 2005. Cascading ecological effects of low-level phosphorus enrichment in the Florida Everglades. *Journal of Environmental Quality* 34: 717-723.
- Gaiser**, E., M. Brooks, W. Kenney, C. Schelske and B. Taylor. 2004. Interpreting the hydrologic history of a temporary pond using siliceous microfossils. *Journal of Paleolimnology* 31: 63-76.
- Donar, C., K. Condon, M. Gantar and E. **Gaiser**. 2004. A new technique for examining the physical structure of Everglades floating periphyton mat. *Nova Hedwigia* 78: 107-119.
- Gaiser**, E., L. Scinto, J. Richards, K. Jayachandran, D. Childers, J. Trexler and R. Jones. 2004. Phosphorus in periphyton mats provides best metric for detecting low-level P enrichment in an oligotrophic wetland. *Water Research* 38: 507-516.
- Thomas, S., E. **Gaiser**, M. Gantar, A. Pinowska, L. Scinto and R. Jones. 2002. Growth of calcareous epilithic mats in the margin of natural and polluted hydrosystems: phosphorus removal implications in the C-111 basin, Florida Everglades, USA. *Lake and Reservoir Management* 18: 323-329.
- Noe, G., D. Childers, A. Edwards, E. **Gaiser**, K. Jayachandran, D. Lee, J. Meeder, J. Richards, L. Scinto, J. Trexler and R. Jones. 2001. Short-term changes in phosphorus storage in an oligotrophic Everglades wetland ecosystem receiving experimental nutrient enrichment. *Biogeochemistry* 59: 239-267.
- Gaiser**, E., B. Taylor and M. Brooks. 2001. Establishment of wetlands on the southeastern Atlantic Coastal Plain: Paleolimnological evidence of a mid-Holocene hydrologic threshold from a South Carolina pond. *Journal of Paleolimnology* 26: 373-391.
- Gaiser**, E. and J. Johansen. 2000. Freshwater diatoms from Carolina bays and other isolated wetlands on the Atlantic Coastal Plain of South Carolina, U.S.A., with descriptions of seven taxa new to science. *Diatom Research* 15: 75-130.

- Gaiser, E., T. Philippi and B. Taylor.** 1998. Distribution of diatoms among intermittent ponds on the Atlantic Coastal Plain: development of a model to predict drought periodicity from surface sediment assemblages. *Journal of Paleolimnology* 20:71-90.
- Gaiser, E. and K. Lang.** 1998. Patterns of cladoceran zooplankton distribution among prairie pothole ponds of northwest Iowa. *Lake and Reservoir Management* 14: 37-51.
- Gaiser, E. and R. Bachmann.** 1994. Seasonality, substrate preference and attachment sites of epizoic diatoms on cladoceran zooplankton. *Journal of Plankton Research* 16: 53-68.
- Gaiser, E. and R. Bachmann.** 1993. The ecology and taxonomy of epizoic diatoms on Cladocera. *Limnology and Oceanography* 38: 628 - 637.

### **Refereed Book Chapters:**

- Gaiser, E., J. Trexler and P. Wetzel.** 2012. The Everglades. In Batzer, D. and A. Baldwin (Eds.), *Wetland Habitats of North America: Ecology and Conservation Concerns*. University of California Press, Berkeley. pp. 231-252.
- Cooper, S., E. **Gaiser** and A. Wachnicka. 2010. Estuarine paleoecological reconstructions using diatoms. In Smol, J. and E. Stoermer (Eds.), *The Diatoms: Applications in Environmental and Earth Sciences*. Cambridge. pp. 324-345.
- Gaiser, E. and K. Rühland.** 2010. Diatoms as indicators of environmental change in wetlands and peatlands. In Smol, J. and E. Stoermer (Eds.), *The Diatoms: Applications in Environmental and Earth Sciences*. Cambridge. pp. 473-496.
- Hall, R., S. Thomas and E. **Gaiser**. 2007. Measuring freshwater primary production and respiration. In Fahey, T. and A. Knapp (Eds.), *Principles and Standards for Measuring Primary Production*. Oxford University Press, UK. pp. 175-203.
- Gaiser, E., A. Wachnicka, P. Ruiz, F. Tobias and M. Ross.** 2004. Diatom indicators of ecosystem change in coastal wetlands. In Bortone, S. (Ed.), *Estuarine Indicators*. CRC Press, Boca Raton, FL. pp. 127-144.
- Ross, M., E. **Gaiser**, J. Meeder and M. Lewin. 2001. Multi-taxon analysis of the "white zone", a common ecotonal feature of South Florida coastal wetlands. In Porter, J. and K. Porter (Eds.), *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press, Boca Raton, FL. pp. 205-238.
- Childers, D., R. Jones, J. Trexler, C. Buzzelli, J. Boyer, A. Edwards, E. **Gaiser**, K. Jayachandaran, D. Lee, J. Meeder, J. Pechmann, J. Richards and L. Scinto. 2001. Quantifying the effects of low level phosphorus enrichment on unimpacted Everglades wetlands with in situ flumes and phosphorus dosing. In Porter, J. and K. Porter (Eds.), *The Everglades, Florida Bay, and Coral Reefs of the Florida Keys*. CRC Press, Boca Raton, FL. pp. 127-152.

### **Edited Compilations:**

- Sullivan, P., E. **Gaiser**, D. Surratt, D. Rudnick, S. Davis, and F. Sklar. In Press. Wetland ecosystem response to hydrologic restoration and management: The Everglades and its urban-agricultural boundary. *Wetlands*
- Anderson, W., and E. **Gaiser**. 2012. Understanding paleoenvironmental change in Everglades wetlands. *Journal of Paleolimnology* 49:1-3.

Trexler, J., E. **Gaiser** and D. Childers. 2006. Interaction of hydrology and nutrients in controlling ecosystem function in oligotrophic coastal environments of South Florida. *Hydrobiologia* Vol. 569.

### **Book Reviews:**

**Gaiser**, E. 2011. Review: Lodge, T. 2010. *The Everglades Handbook: Understanding the Ecosystem*. 3<sup>rd</sup> Edition. CRC Press. *Wetlands* DOI: 10.1007/s13157-011-0149-8

**Gaiser**, E. 2000. Review: Stoermer, E. and J. Smol. 1999. *The Diatoms: Applications for the Environmental and Earth Sciences*. Cambridge University Press *Limnology and Oceanography* 45: 860-863.

### **Scholarly Commentary:**

**Gaiser**, E. 2012. Think like a diatom. *Word and World* 32: 21-25.

**Gaiser**, E. 2009. Two biologists on church and faith: A call for building partnerships. *Word and World* 29: 85-87.

## **PAPERS/PRESENTATIONS AT MEETINGS/CONFERENCES**

### **Invited Seminars:**

Gaiser, E. 2013. Understanding an iconic landscape through comparative international long-term ecological research. Annual Meeting of the International Long-Term Ecological Research Network. Seoul, Korea.

Gaiser, E. 2013. Linking high-resolution datasets to phytoplankton community change. Annual Meeting of the Global Lakes Ecological Observatory Network. Bahia Blanca, Argentina.

Gaiser, E. 2013. Understanding an iconic landscape through comparative international long-term ecological research. LTER Science Council Meeting. Las Cruces, NM.

Gaiser, E. 2013. Unraveling the biogeography of karstic wetland diatoms from Canada to the tropics. Iowa Lakeside Laboratory. Milford, IA.

Gaiser, E. 2013. Diatoms of karst rock pools. Misery Bay Science Center. Misery Bay, Ontario.

Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe, and H. Swain. 2013. Using long-term observational datasets from lakes to understand climate and land-use change influences on hydrology on the Lake Wales Ridge. Lake Wales Ridge Ecosystem Working Group Meeting. Avon Park. FL.

Gaiser, E. 2012. Sensor deployment and operations. Organization for Biological Field Stations Meeting. Archbold Biological Station. Lake Placid, FL.

Gaiser, E. 2012. Evidence for multi-decadal climate controls on South Florida Ecosystems. Department of Paleoecology. Utrecht University. Utrecht, The Netherlands.

Gaiser, E. 2012. Florida Coastal Everglades Long-Term Ecological Research Program. Department of Biological Sciences, Western Kentucky University. Bowling Green, KY.

Gaiser, E. 2012. Expecting the unexpected: Paradox in an upside-down estuary. Ocean Life Lecture Series. School for Environment, Arts and Society. Florida International University. Key Largo, FL.

- Gaiser, E. 2012. Expecting the unexpected: Paradox in an upside-down estuary. Department of Ecology, Evolution and Organismal Biology. Iowa State University. Ames, Iowa.
- Gaiser, E. 2011. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biological Sciences, Florida International University, Miami, FL.
- Gaiser, E. 2011. Legacies and scenarios of socio-ecological change in a novel, vulnerable landscape. Department of Biological Sciences, Kent State University, Kent, Ohio.
- Gaiser, E. 2011. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biological Sciences, University of Miami, Miami, FL.
- Gaiser, E. 2011. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Ecology and Environmental Sciences. Umeå Universitet, Umeå, Sweden.
- Gaiser, E. 2011. Florida Coastal Everglades Long Term Ecological Research. Finnish Environment Institute, Helsinki, Finland.
- Gaiser, E. 2011. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biological Sciences, Kent State University, Kent, Ohio.
- Gaiser, E. 2011. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biological Sciences, Cleveland State University, Cleveland, Ohio.
- Gaiser, E. 2010. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Environmental Studies, Utrecht University, Utrecht, Netherlands.
- Gaiser, E. 2010. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. Department of Biology, Utrecht University, Utrecht, Netherlands.
- Gaiser, E. 2010. Expecting the unexpected: Pandora's box of paradox in an upside-down estuary. University of Michigan Biological Station, Douglas Lake, Michigan.
- Gaiser, E. 2010. Pandora's box of paradox: expecting the unexpected in an upside-down estuary. University of Florida Tropical Research and Education Center, Homestead, Florida.
- Gaiser, E. 2010. Pandora's box of paradox: expecting the unexpected in an upside-down estuary. University of Florida, Gainesville, Florida.
- Gaiser, E. 2009. Pandora's box of paradox: expecting the unexpected in an upside-down estuary. Ave Maria University. Ave Maria, Florida.
- Gaiser, E., V. Rivera-Monroy, S. Davis, V. Engle and J. Fuentes. 2009. Effects of hurricanes on state changes in the Florida Everglades. Caribbean Hurricane Research Network meeting. Merida, Mexico.
- Gaiser, E. 2009. Pandora's box of paradox: expecting the unexpected in an upside-down estuary. University of Georgia Odum School of Ecology Graduate Student Symposium Plenary Lecture. Athens, GA.
- Gaiser, E. and L. Ogden. 2009. Florida Coastal Everglades Long-Term Ecological Research program. LTER Network Graduate Education Course. Athens, GA.
- Gaiser, E. 2009. Method development on calculating water column stability from high resolution thermal data. Global Lake Ecological Observatory Network meeting. Hamilton, New Zealand.
- Gaiser, E. and H. Swain. 2008. Six months of high frequency limnological data from Lake Annie, Florida. Global Lake Ecological Observatory Network meeting. Norttälje, Sweden.
- Gaiser, E, M. Ross, P. Ruiz, A. Wachnicka and A. Zafiris. 2008. Effects of gradient compression on the habitat mosaic of remnant coastal wetlands in a subtropical, urban landscape. Annual Meeting of the Society for Wetland Scientists. Washington, DC.

- Gaiser, E. 2008. Gradients of anthropogenic impact on periphyton abundance and composition in the Florida Coastal Everglades. American Society of Limnology and Oceanography Ocean Sciences Meeting. Orlando, FL.
- Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe and H. Swain. 2007. A 23-year record of cascading limnological effects of a shifting light environment in a monomictic seepage lake in central Florida. Global Lakes Ecological Observatory Network meeting. Lammi Biological Station, Finland.
- Gaiser, E. 2006. Why is periphyton so abundant in the Everglades? Florida Ecology and Evolution Society Annual Meeting. Archbold Biological Station, FL.
- Gaiser, E. 2006. Ecological research in the FIU Department of Biology. FIU-Universidad Nacional Autónoma de México Marine Sciences Meeting. Merida, Yucatan, Mexico
- Gaiser, E., R. Bachmann, N. Deyrup, L. Battoe and H. Swain. 2006. A 20-year limnological dataset from Lake Annie, FL. Archbold Biological Station, Lake Placid, FL
- Gaiser, E. 2005. Cascading ecological effects of low-level phosphorus enrichment and abatement in the Florida Everglades. Illinois Natural History Survey, University of Illinois, Champaign, IL.
- Gaiser, E. 2004. Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. Harvard Forest, Harvard University, Petersham, MA.
- Gaiser, E. 2004. Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. University of Georgia, Athens, GA.
- Gaiser, E. 2003. Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. Nova Southeastern University Oceanographic Institute, Delray Beach, FL.
- Gaiser, E. 2003. Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. Department of Fisheries and Aquatic Sciences, University of Florida, Gainesville, FL.
- Gaiser, E. 2003. Establishing a phosphorus criterion to protect the Everglades: cascading ecological imbalances suggest a critical minimum standard. Department of Biology, Southern Illinois University, Carbondale, IL.
- Gaiser, E. 2002. Primary production at the Florida Coastal Everglades Long-Term Ecological Research sites. FCE-LTER All Scientists Meeting. Florida International University. Miami, FL.
- Gaiser, E. 2002. Periphyton of the Florida Everglades. South Florida Native Plant Society Meeting. Fairchild Tropical Gardens. Miami, FL.
- Gaiser, E. 2001. Periphyton in the Florida Everglades: effects of hydroperiod and nutrients on structural and functional dynamics. University of Miami, Department of Biology, Miami, FL.
- Gaiser, E. 1994. Development of a long-term limnological data base for lakes of Manitoulin Island, Ontario. Institute of Ecology Hydrobiology Symposium. Athens, GA.

### **Scientific Conferences:**

- Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe, and H. Swain. 2013. Using long-term observational datasets from lakes to understand climate and land-use change influences

- on hydrology on the Lake Wales Ridge. Lake Wales Ridge Ecosystem Working Group Meeting. Avon Park. FL.
- Gaiser, E. 2013. Commonalities in the diatom flora and benthic habitat structure of Caribbean karst and Canadian alvar wetlands. North American Diatom Symposium. Bar Harbor, ME.
- Gaiser, E., A. Quillen and H. Swain. 2013. Combining long-term observational and paleolimnological records to distinguish climate from local land use signals in a reference watershed. American Society for Limnology and Oceanography Annual Meeting. New Orleans, LA.
- Gaiser, E. 2012. Ecosystem-wide assessment of Everglades restoration using periphyton. International Association for Ecology Wetlands Conference. Orlando, FL.
- Gaiser, E. 2012. Florida Coastal Everglades Long-Term Ecological Research Program – Status Update. Deering Estate. Miami, FL
- Gaiser, E. 2011. Update of the GLEON Limnological Theory group. Global Lake Ecological Observatory Network Annual Meeting. Lake Sunapee, NH.
- Gaiser, E. 2011. Update on the Lake Annie sensor network at Archbold Biological Station. Semi-Annual Meeting of the Global Lake Ecological Observatory Network. Ramot, Israel.
- Gaiser, E. 2011. Update on the Lake Annie sensor network at Archbold Biological Station. Semi-Annual Meeting of the Global Lake Ecological Observatory Network. Ramot, Israel.
- Gaiser, E. 2011. Advanced in theoretical limnology: predicting phytoplankton assembly shifts from high-resolution environmental data. Semi-Annual Meeting of the Global Lake Ecological Observatory Network. Ramot, Israel.
- Gaiser, E. 2011. Advanced in theoretical limnology: predicting phytoplankton assembly shifts from high-resolution environmental data. Workshop of the Global Lake Ecological Observatory Network. Kastanienbaum, Switzerland.
- Gaiser, E. 2010. How to incorporate variability in community sensitivity in detecting ecological responses to management-driven shifts in hydrology and water quality. Greater Everglades Ecosystem Restoration Conference, Naples, FL.
- Gaiser, E. 2010. Regulation of oligotrophy by periphyton in karstic wetlands. Annual Meeting of the American Society of Limnology and Oceanography, Santa Fe, NM.
- Gaiser, E. 2009. *Mastogloia smithii* Thwaites *ex* Wm. Smith: A structural engineer of calcareous mats in karstic subtropical wetlands. North American Diatom Symposium. Milford, IA.
- Gaiser, E. 2009. Synchronized legacies of tropical storms on solute concentrations and primary production from uplands to coast in an expansive subtropical watershed. Biannual Meeting of the Coastal and Estuarine Research Foundation. Portland, OR.
- Gaiser, E. 2009. Synchronized legacies of tropical storms on solute concentrations and primary production from uplands to coast in an expansive subtropical watershed. Biannual Meeting of the Coastal and Estuarine Research Foundation. Portland, OR.
- Gaiser, E. and J. Munyon. 2009. Effects of scale on the paradox of production in an oligotrophic wetland. Annual Meeting of the Ecological Society of America. Albuquerque, NM.
- Gaiser, E. and J. La Hée. 2009. Landscape-scale patterns of periphyton abundance and composition in the Florida Everglades. Annual Meeting of the Ecological Society of America. Albuquerque, NM.
- Gaiser, E., J. La Hée, J. Trexler, C. Ruehl and W. Loftus. 2008. Factors governing composition and production of freshwater stromatolitic mats in subtropical calcareous wetlands of the Caribbean. Annual Meeting of the Ecological Society of America. Milwaukee, WI.

- Gaiser, E. and J. La Hée. 2008. Landscape-scale patterns of periphyton abundance and composition in the Florida Everglades. Greater Everglades Ecosystem Restoration Conference. Naples, FL.
- Gaiser, E. 2008. Landscape patterns of periphyton distribution in the Everglades. Greater Everglades Ecosystem Restoration Conference. Naples, FL.
- Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe and H. Swain. 2008. Effects of changes in precipitation on transparency and thermal structure in subtropical, monomictic Lake Annie, Florida. Annual Meeting of the American Society of Limnology and Oceanography. St. John's, Newfoundland.
- Gaiser, E. and H. Swain. 2008. Deployment of continuous monitoring sensors on Lake Annie, FL. Global Lake Ecological Observatory Network meeting. Archbold Biological Station, FL.
- Gaiser, E. and J. La Hée. 2007. Taxonomic and morphological variability in diatoms endemic to modern stromatolitic microbial mats of Caribbean wetlands. North American Diatom Symposium. Pellston, MI.
- Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe and H. Swain. 2007. Long-term shifts in water transparency alter thermal responses to climate change in a subtropical, monomictic seepage lake. 30<sup>th</sup> Congress of the International Association of Theoretical and Applied Limnology. Montreal, Quebec.
- Gaiser, E. 2007. Linking spatial and temporal patterns of benthic algal primary production to climate and water management drivers in the Florida Coastal Everglades Long-Term Ecological Research Program. North American Benthological Society Annual Meeting. Columbia, SC.
- Gaiser, E. and S. Thomas. 2007. Freshwater periphyton communities in the Greater Everglades: modeling responses to hydrology and water quality. National Conference on Ecosystem Restoration. Kansas City, MO.
- Gaiser, E. and D. Childers. 2007. State of the Program report. Florida Coastal Everglades Long-Term Ecological Research program Annual All Scientists Meeting. Miami, FL.
- Gaiser, E., J. Fourqurean, D. Childers, R. Monroy-Rivera and S. Davis. 2007. Primary production in the Florida Coastal Everglades Long-Term Ecological Research Program. Florida Coastal Everglades Long-Term Ecological Research program Annual All Scientists Meeting. Miami, FL.
- Gaiser, E. 2007. Patterns of periphyton production in the Florida Coastal Everglades Long-Term Ecological Research program. South Florida and Caribbean Cooperative Ecosystems Studies Unit Annual Meeting, Miami, FL.
- Gaiser, E., D. Iwaniec, T. Frankovich, S. Thomas and S. Ewe. 2006. Benthic algal productivity in the Florida Coastal Everglades. Long-Term Ecological Research Program All Scientists Meeting. Estes Park, CO.
- Gaiser, E., N. Deyrup, R. Bachmann, L. Battoe and H. Swain. 2006. A 23-year record of cascading limnological effects of a shifting light environment in a monomictic seepage lake in central Florida. Ecological Society of America. Annual Meeting. Memphis, TN.
- Gaiser, E. and S. Thomas. 2006. Freshwater periphyton communities of the Florida Everglades: An update on performance measures. Greater Everglades Ecosystem Restoration Science Annual Meeting. Orlando, FL.
- Gaiser, E., A. Zafiris, P. Ruiz, F. Tobias and M. Ross. 2006. Tracking rates of salt-water encroachment using fossil mollusks in coastal south Florida. Florida Bay and Adjacent Marine Systems Science Conference. Duck Key, FL.

- Gaiser, E. 2005. Marine benthic diatoms of Bocas Del Toro, Panama. 18<sup>th</sup> North American Diatom Symposium. Mobile, AL.
- Gaiser, E., A. Wachnicka, R. Jaffe, Y. Xu and J. Fourqurean. 2005. Paleoenvironmental history of Florida Bay: Interpretations of diatom trends and linkages to other ecological proxies. North American Benthological Society. Annual Meeting. New Orleans, LA.
- Gaiser, E. 2004. Cascading ecological effects of low-level phosphorus enrichment and abatement in the Florida Everglades. National Conference on Ecosystem Restoration. Orlando, FL.
- Gaiser, E., A. Zafiris and M. Ross. 2004. Using paleoecology to calculate rates of migration of coastal vegetation zones due to salt-water encroachment in South Florida. Ecological Society of America. Annual Meeting. Portland, OR.
- Gaiser, E., A. Wachnicka, A. Zafiris, P. Ruiz and M. Ross. 2003. Paleoecological determination of effects of saltwater encroachment on community migration in coastal South Florida wetlands. Ecological Society of America. Annual Meeting. Savannah, GA.
- Gaiser, E., A. Edwards, K. Jayachandran, R. Jones, D. Lee, T. Philippi, J. Richards, L. Scinto and J. Trexler. 2003. Experimental phosphorus enrichment in Everglades National Park: I. Approach and Methods. Greater Everglades Ecosystem Restoration Science Conference. Tampa Bay, FL.
- Gaiser, E., D. Childers, K. Jayachandran, R. Jones, D. Lee, G. Noe, T. Philippi, J. Richards, L. Scinto and J. Trexler. 2003. Experimental phosphorus enrichment in Everglades National Park: III. Application to large-scale pattern of enrichment in Everglades Marshes. Greater Everglades Ecosystem Restoration Science Conference. Tampa Bay, FL.
- Gaiser, E. and M. Ross. 2002. Water flow through coastal wetlands. Biscayne Bay Coastal Wetlands Science Meeting. Miami, FL.
- Gaiser, E. 2002. Using diatoms to create performance measures in Biscayne coastal wetlands. Biscayne Bay Coastal Wetlands Science Meeting. Miami, FL.
- Gaiser, E., D. Childers and R. Jones. 2002. Effects of hydrologic and nutrient alterations on periphyton biomass and composition across the Everglades landscape, Florida, USA. American Society of Limnology and Oceanography. Annual Meeting. Victoria, BC.
- Gaiser, E. 2001. *Gomphonema* of the Florida Everglades. National Water Quality Assessment Taxonomy Workshop. Academy of Natural Sciences, Philadelphia, PA.
- Gaiser, E. and R. Jones. 2001. Predicting phosphorus from diatom species composition in the Everglades: effects of unstable phosphorus optima. 16<sup>th</sup> North American Diatom Symposium. Ely, MN.
- Gaiser, E., M. Brooks, W. Kenney, C. Schelske and B. Taylor. 2001. Climatic interpretation of alternations between flooded and ponded states in the Holocene history of a temporary pond in South Carolina, USA. American Society of Limnology and Oceanography. Annual Meeting. Albuquerque, NM.
- Gaiser, E., L. Scinto, J. Richards, D. Childers, J. Trexler, K. Jayachandran and R. Jones. 2000. Nutrients sequestered in microbial mats reflect remote source water quality in Everglades National Park. Greater Everglades Ecosystem Restoration Science Conference. Naples, FL.
- Gaiser, E., R. Jones and J. Stober. 2000. Using diatoms for risk assessment in the Everglades. Greater Everglades Ecosystem Restoration Science Conference. Naples, FL.
- Gaiser, E., J. Boyer, D. Childers, J. Fourqurean, J. Richards, M. Ross and R. Twilley. 2000. Trends in primary production at the Florida Coastal Everglades (FCE) LTER: Existing

- data and future plans. NSF Long Term Ecological Research Program All Scientists Meeting. Snowbird, UT.
- Gaiser, E. and M. Ross. 1999. Diatom indicators of salt-water encroachment in South Florida coastal mangrove wetlands. 15<sup>th</sup> North American Diatom Symposium. Pingree Park, CO.
- Gaiser, E., J. Richards and R. Jones. 1999. Effects of low-level phosphorus enrichment on Everglades periphyton. Ecological Society of America. Annual Meeting. Spokane, WA.
- Gaiser, E., M. Ross, J. Meeder and M. Lewin. 1999. Multi-taxon analysis of the "white zone", a common ecotonal feature of South Florida coastal wetlands. Florida Bay Ecosystem Science Conference. Key Largo, FL.
- Gaiser, E., S. DeCelles and J. Richards. 1999. Seasonality and succession of periphyton communities in Everglades National Park, Florida. American Society of Limnology and Oceanography. Annual Meeting. Santa Fe, NM.
- Gaiser, E. 1997. Paleolimnological Reconstruction of Holocene Environments in Wetland Ponds of the Upper Atlantic Coastal Plain using Siliceous Microfossils. 14<sup>th</sup> North American Diatom Symposium. Pellston, MI.
- Gaiser, E. 1997. Development of a diatom-based transfer function to infer pond permanence from fossil assemblages in intermittent ponds of South Carolina. American Society of Limnology and Oceanography. Annual Meeting. Santa Fe, NM.
- Gaiser, E. and B. Taylor. 1996. Development of a model for inferring drought periodicity from diatoms in ephemeral ponds of the Atlantic Coastal Plain. Ecological Society of America. Annual Meeting. Providence, RI.
- Gaiser, E. and B. Taylor. 1996. Paleolimnological reconstruction of Holocene environments in Carolina Bays and upland wetland ponds of the Atlantic Coastal Plain. Association of Southeastern Biologists. Annual Meeting. Statesborough, GA.
- Gaiser, E. 1995. Distribution of diatoms along hydrologic gradients within and among Carolina bays of the Upper Atlantic Coastal Plain. 17<sup>th</sup> Southeastern Phycological Colloquy. Charleston, SC.
- Gaiser, E. and B. Taylor. 1995. Development of a diatom training set for the reconstruction of hydrologies in Carolina bays of the Upper Atlantic Coastal Plain. 13<sup>th</sup> North American Diatom Symposium. Milford, IA.
- Gaiser, E. and B. Taylor. 1995. Paleolimnological reconstruction of Holocene environments in wetland ponds of the Upper Atlantic Coastal Plain. Ecological Society of America. Annual Meeting. Snowbird, UT.
- Gaiser, E. and R. Bachmann. 1993. Seasonality and taxonomy of epizoic diatoms on planktonic cladocerans in three Iowa lakes. Ecological Society of America. Annual Meeting. Madison, WI.
- Gaiser, E. 1993. Holocene diatoms of Carolina Bay wetlands. American Society of Limnology and Oceanography and the Society of Wetland Scientists. Annual Meeting. Edmonton, Alberta, Canada.
- Gaiser, E. and R. Bachmann. 1991. The ecology and taxonomy of epizoic diatoms on Cladocera. Ecological Society of America. Annual Meeting. San Antonio, TX.

## RESEARCH GRANTS/CONTRACTS

- Trexler, J. and E. **Gaiser**. Aquatic fauna and periphyton production data collection. South Florida Water Management District. \$320,000. January 2014-September 2014.

- Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** FCE III: Coastal Oligotrophic Ecosystems Research. National Science Foundation. \$5,880,000. December 2012 – November 2018.
- Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** FCE II: Coastal Oligotrophic Ecosystems Research Supplement. National Science Foundation. \$179,000. September 2012 – November 2013.
- Wachnicka, A. and E. **Gaiser.** A multi-proxy study of environmental change and ecological regime shift detection in Florida Bay and Biscayne Bay, Florida (USA) over the last 100-10000 years. United States Geological Survey. \$25,000. April 2012-December 2013.
- Trexler, J. and E. **Gaiser.** Aquatic fauna and periphyton production data collection. South Florida Water Management District. \$320,000. January 2013-September 2013.
- Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** FCE II: Coastal Oligotrophic Ecosystems Research Supplement. National Science Foundation. \$112,620. September 2011 – November 2012.
- Gaiser, E., J. Trexler, J. Richards, L. Scinto and A. Bramburger.** Ecological effects of modified water delivery to Everglades National Park. Department of Interior, National Park Service. \$366,000. March 2011-December 2016.
- Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** FCE II: Coastal Oligotrophic Ecosystems Research Supplement. National Science Foundation. \$158,000. September 2010 – November 2011.
- Lee, S. and E. **Gaiser.** Diatom-based interpretations of sensitivity to change in the Greater Everglades. Everglades Foundation Student Fellowship. \$20,000. January 2010-January 2012.
- Hollander, G., L. Ogden, M. Ross, J. Heffernan and E. **Gaiser.** Double Exposures: Socio-ecological vulnerabilities in the Miami-Dade Urban Region. Urban Long-Term Research Exploratory Grant. National Science Foundation. \$300,000. October 2009 – December 2012.
- Jaffé, R., E. **Gaiser** and J. La Hée. Causes and trends of enrichment in upper Taylor Slough, Everglades National Park. Department of Interior, National Park Service. Post-doctoral Fellowship Grant. \$90,000. January 2010-January 2012.
- Trexler, J. and E. **Gaiser.** Aquatic fauna and periphyton production data collection. South Florida Water Management District. \$1,100,000. October 2008-September 2012.
- Gaiser, E.** Developing periphyton-based hydrologic indicators for the Everglades marl prairie. Department of Interior, National Park Service. \$90,000. Jan 2008-March 2011.
- Gaiser, E., J. Trexler, J. Richards and L. Scinto.** Effects of Tamiami Trail swale creation on ecosystem structure and nutrient delivery to Everglades National Park. \$314,000. June 2009 – June 2010.
- Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** FCE II: Coastal Oligotrophic Ecosystems Research Supplement. National Science Foundation. \$138,000. September 2009 – November 2010.
- Gaiser, E., R. Jaffe, M. Heithaus, L. Ogden and R. Price.** FCE II: Coastal Oligotrophic Ecosystems Research Supplement. National Science Foundation. \$108,000. September 2008 – November 2009.
- Gaiser, E., R. Jaffe, M. Heithaus and R. Price.** FCE II: Coastal Oligotrophic Ecosystems Research Supplement. National Science Foundation. \$103,764. August 2007 – August 2008.

- Gaiser, E., R. Jaffe, M. Heithaus and R. Price.** FCE II: Coastal Oligotrophic Ecosystems Research. National Science Foundation. \$4,919,999. December 2006 – December 2012.
- Gaiser, E. and J. Trexler.** Comparing food web structure between Everglades and other calcareous wetlands of the Caribbean. National Science Foundation Long-Term Ecological Research program International Supplement. \$10,000. May 2006-May 2007.
- Gaiser, E., J. Trexler, L. Scinto and D. Childers.** Developing ecosystem response indicators to hydrologic and nutrient modifications in Northeast Shark River Slough, Everglades National Park. Department of the Interior, National Park Service. \$407,261. January 2006 – December 2008.
- Gaiser, E., J. Trexler, L. Scinto and R. Price.** Phosphorus retention and sub-surface movement through the S-332 detention basins on the eastern boundary of Everglades National Park. Department of the Interior, National Park Service. \$418,320. August 2005-July 2008.
- Richards, J., T. Philippi, J. Trexler, E. **Gaiser**, Y. Cai, L. Scinto and D. Childers. Monitoring, modeling and assessment of the Everglades ecosystem: R-EMAP Phase III. U.S. Environmental Protection Agency. \$90,536. October 2005-October 2008.
- Trexler, J., E. **Gaiser** and T. Philippi. Aquatic fauna and periphyton production data collection. South Florida Water Management District. \$1,100,000. October 2004-September 2008.
- Gaiser, E.** Analysis of algae of the Wekiva Spring drainage, FL. St. John's River Water Management District. \$11,725. August 2005 – December 2005.
- Gaiser, E.** Diatom-based water quality performance metrics for Biscayne Bay. Department of Interior the, National Park Service. \$43,000. September 2004 – September 2005.
- Anderson, W., E. **Gaiser** and L. Scinto. Lake Harney sediment accumulation and past water quality. St. John's River Water Management District. \$98,000. July 2004 – October 2005.
- Gaiser, E., J. Trexler and J. Richards.** Linking hydrology to biological recovery after cessation of long-term phosphorus enrichment at the experimental dosing facility in Everglades National Park. Department of the Interior, National Park Service. \$67,000. September 2003 – September 2004.
- Gaiser, E.** Water quality in Biscayne Bay. Diatom Component. United States Geological Survey. \$12,000. September 2003 – September 2004.
- Gaiser, E. and M. Ross.** Water flow through coastal wetlands. Department of the Interior, National Park Service. \$15,000. September 2003 – September 2004.
- Anderson, W., E. **Gaiser** and L. Scinto. Lake Monroe sediment accumulation and past water quality. St. John's River Water Management District. \$131,610. July 2003 – October 2004.
- Gaiser, E.** Determine rates and biological consequences of salt-water encroachment in coastal wetlands in Biscayne National Park. Department of the Interior, National Park Service. \$86,766. June 2003 – June 2004.
- Gaiser, E., J. Trexler and J. Richards.** Numerical interpretation of Class III Nutrient Water Criteria for Everglades wetlands. Department of the Interior, National Park Service and the South Florida Water Management District \$560,000. May 2002 – September 2003.
- Gaiser, E.** Characterization of periphyton response to hydroperiod in marl prairie wetlands in the Everglades. Department of the Interior, National Park Service. \$295,130. September 2002- September 2005.
- Gaiser, E. and M. Ross.** Water flow through coastal wetlands. Department of the Interior, National Park Service. \$180,000. September 2001 – September 2003.

- Jones, R., E. **Gaiser**, M. Gantar and L. Scinto. Periphyton design and analysis for the C-51 (STA 1 – East) Project. U.S. Army Corps of Engineers. \$792,000. August 2001 – August 2003.
- Jones, R., E. **Gaiser**, M. Gantar and L. Scinto. Evaluation of the potential use of periphyton-dominated storm water treatment areas for phosphorus reduction in the southern Everglades. Department of the Interior, National Park Service. \$580,000. September 2000 – September 2002.
- Jones, R., E. **Gaiser**, M. Gantar and L. Scinto. Research integration of natural advanced treatment technologies. South Florida Water Management District. \$570,000. January 1999 - January 2001.
- Meeder, J., M. Ross and E. **Gaiser**. Southern Biscayne Bay watershed historical creek characterization. South Florida Water Management District. \$74,000. March 1999 - March 2001.
- Jones, R., D. Childers, J. Trexler, D. Lee, J. Richards, K. Jayachandran, E. **Gaiser** and L. Scinto. Numerical interpretation of Class III narrative nutrient water quality criteria for Everglades wetlands. Department of the Interior, National Park Service and the South Florida Water Management District. \$4,600,000. January 1996 -December 2002.
- Childers, D., C. Buzzelli, E. **Gaiser**, R. Jones, J. Richards, L. Scinto and J. Trexler. Using transect sampling to relate a phosphorus addition flume study to long-term water quality impacts in Everglades marshes. Department of the Interior, National Park Service. \$241,000. November 1998 - November 1999.
- Taylor, B. and E. **Gaiser**. Paleolimnological reconstruction of Holocene environments in wetland ponds of the Upper Atlantic Coastal Plain. National Science Foundation - Dissertation Improvement Grant. \$5,750. September 1995 – February 1997.
- Bachmann, R. and E. **Gaiser**. Diatoms living on cladocerans: An analysis of a new symbiosis discovered in Iowa lakes. Iowa Science Foundation. \$1,200. June 1990 - June 1991.

## **OTHER RESEARCH/SCHOLARSHIP/CREATIVE ACTIVITIES**

### **Professional Research Service:**

*Lead Principal Investigator:* Florida Coastal Everglades Long-Term Ecological Research Program (fcelter.fiu.edu), 2007-present

### *Meetings Hosted or Chaired:*

- Host, South Florida Paleoecology Symposium, Florida International University, October 2013.
- Co-Chair, Long Term Ecological Research Program Science Council Meeting, Oregon, May 2012.
- Host, Caribbean Hurricane Research Network Meeting, December, 2009, Miami, FL.
- Host, 6<sup>th</sup> Global Lake Ecological Observatory Network meeting, February, 2008, Archbold Biological Station, FL.
- Host, 17<sup>th</sup> North American Diatom Symposium, Islamorada, FL, October, 2003
- Host, Annual FCE-LTER All Scientists Meeting, Miami, FL (2007 to present)

### *Advisory Committees and Executive Boards:*

- Long-Term Ecological Research Network Executive Board, 2012-2015
- International Association of Diatom Research Executive Board, 2012-2015

- Global Lake Ecological Observatory Network, Steering Committee (2009-2015)
- National Ecological Observatory Network Southeast Domain, Science Advisory Committee, 2009-2011
- Florida Department of Environmental Protection, Water Quality Criterion Advisor, 2008
- Everglades Integrative Assessment Team, South Florida Water Management District, West Palm Beach, FL 2001-2005
- Environmental Regulatory Committee, Florida Department of Environmental Protection, Tallahassee, FL, 2001-2005

*Editorial Service:*

- Associate Editor, *Frontiers in Ecology and Evolution* , 2014-present
- Associate Editor, *Wetlands*, 2012-present
- Special Issue Editor, *Wetlands*, 2013
- Special Issue Editor, *Journal of Paleolimnology*, 2012
- Special Issue Editor, *Hydrobiologia*, 2006

*External Proposal Panelist:*

- National Science Foundation (15)
- U.S. Environmental Protection Agency (8)
- Florida Department of Environmental Protection (2)

**University Service:**

- Member, FIU Research Council, 2009-present
- Member, SERC Director Search Committee, 2013
- Member, Biology Personnel Committee, 2012-present
- Chair, Ecosystems Ecologist Search Committee, 2012
- Member, Biology Facilities Committee, 2006-2010
- Member, Biology Graduate Committee, 2008-present
- Chair, Ecosystems Ecologist Search Committee, 2009
- Chair, Visiting Ecologist Search Committee, 2008
- Chair, Biology Vehicle Committee, 2006-2010
- Member, SERC Public Relations Committee, 2005-2007

**Academic Supervision:**

*Completed Degrees:*

- Ewan Isherwood, M.S., Biological Sciences, 2013
- Gregory Koch, Ph.D., Biological Sciences, 2011
- Josette La Hée, Ph.D., Biological Sciences, 2010
- Jay Munyon, M.S., Biological Sciences, 2009
- Amanda Quillen, Ph.D., Biological Sciences, 2009
- Anna Wachnicka, Ph.D., Earth Sciences, 2009
- Pamela Bachman, Ph.D., Biological Sciences, 2009
- Elaine Fontes, M.S., Environmental Studies, 2008

*Completed committees served:*

Robin Abbey-Lee, Ph.D., Biology, 2013  
Rebecca Garvoille, Ph.D., Global and Sociocultural Studies, 2012  
Raul Urgelles, M.S., Biological Sciences, 2010  
Clifton Ruehl, Ph.D., Biological Sciences, 2010  
Rudolf Von May, Ph.D., Biological Sciences, 2010  
Jie Cheng, Ph.D. Earth Sciences, 2009  
Clayton Williams, Ph.D. Biology, 2008  
David Iwaniec, M.S. Biology, 2008  
Bryan P. Carroll, M.S. Earth Sciences, 2006  
Jeffrey Wozniak, Ph.D. Biology, 2006  
Matthew Rogers, M.S. Biology, 2006  
Sreepat Jain, Ph.D. Earth Sciences, 2006  
Charles Goss, M.S. Biology, 2006  
Alison Stone, M.S. Environmental Studies, 2005  
Andrew Gottlieb, Ph.D. Biology, 2003

*Post-doctoral advisees:*

Pamela Sullivan, Post-doctoral Associate, 2012  
Ania Wachnicka, Post-doctoral Associate, 2009-2012  
Amartya Saha, Post-doctoral Associate, 2010-2011  
Andrew Bramburger, Post-doctoral Associate, 2009-2011  
Josette La Hée, Post-doctoral Associate, 2009-2010  
Serge Thomas, Post-doctoral Associate, 2001-2004  
Christopher Donar, Post-doctoral Associate, 2000-2001

*Mentoring and Training:*

- Mentor for National Science Foundation Research Experience for High School Student Program (2008-present)
- Mentor for National Science Foundation Research Experience for Teachers Program (2007-present)
- Mentor for National Science Foundation Research Experience for Undergraduates Program (2003-present)
- Mentor for National Science Foundation Undergraduate Mentoring in Environmental Biology Program (2005-2006)
- Collaborator and participant in National Science Foundation Faculty Initiatives for Reforming Science Teaching (2004-2006)

**Awards and Scholarships:**

*Provost's Award for Excellence in Research and Creative Activities*, Florida International University, 2012

*Provost's Award for Excellence in Faculty Scholarship*, Florida International University, 2008

*Provost's Award for Excellence in Teaching*, Florida International University, 2006

*Provost's Award for Excellence in Research*, Florida International University, 2005

*Jessup and McHenry Fellowship*, Academy of Natural Sciences, Philadelphia, 1993, 1996

*Outstanding Graduate Research Award, Sigma Xi, SRA Chapter, 1995*  
*Graduate Student Organization President, Savannah River Ecology Laboratory, 1995*  
*Best Student Publication, Institute of Ecology, University of Georgia, 1993*  
*Premium for Academic Excellence Scholarship, Iowa State University, 1989-90*  
*Graduate Student Organization President, Animal Ecology, Iowa State University, 1990*  
*Thomas H. MacBride Scholarship, University of Iowa, 1990*  
*Iowa Lakeside Laboratory Scholarship, Iowa State University, 1989-90*  
*Dexter Outstanding Undergraduate Student Award, Kent State University, 1989*