

## **A. Biographical Information:**

Donald P. Morris

Address: Department of Earth & Environmental Sciences  
Lehigh University  
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### **Degrees:**

Ph.D, Environmental Biology, University of Colorado, Boulder 1990.  
M.A., Environmental Biology, University of Colorado, Boulder, 1985.  
B.A., Biology, University of Colorado, Boulder, 1978.

### **Employment:**

Associate Professor, Department of Earth and Environmental Sciences, Lehigh University, Bethlehem, PA (1998 to present)

Assistant Professor, Department of Earth and Environmental Sciences, Lehigh University, Bethlehem, PA (1993 to 1998).

Post Doctoral Research Associate, Center for Limnology (William M. Lewis, Jr), University of Colorado, Boulder (1991-1992).

## **B. Publications and Creative Activities:**

### **Book Chapters:**

**Morris, D. P.** 2009. Optical Properties of Water. In: *Encyclopedia of Inland Waters*. G.E. Likens, Editor. Oxford: Elsevier.

Osburn C.L. and **D.P. Morris**. 2003. Photochemistry of dissolved organic matter in natural waters, In: *UV Effects in Aquatic Organisms and Ecosystems*, E.W. Hebling and H.E. Zagarese [eds.]. European Society of Photobiology. pp. 185-217.

### Articles in Refereed Journals:

**Morris, D.P.**, D. Soto Benavides, A. Patricia Pérez, Marcela A. Ferraro, Diego A. Añón Suárez, Bruce R. Hargreaves, Jorge Jaramillo, Patricio R. De los Ríos Escalante, Horacio E. Zagarese. Variability in the Rate of CDOM Photobleaching and its Control in Lakes. *Biogeochemistry*, (*submitted*).

Belmont, P., **Morris D.P.**, Pazzaglia F.J., and Peters S.C. 2009. Penetration of ultraviolet radiation in streams of eastern Pennsylvania: Topographic controls and the role of suspended particulates. *Aquatic Sciences*.

Stephen C. Peters, Jennifer L. Wollenberg, **D. P. Morris**, and Jason Porter. 2007. Mercury Emission to the Atmosphere from Experimental Manipulation of DOC and UVR in Mesoscale Field Chambers in a Freshwater Lake. *Environmental Science and Technology* 41:7356-7362.

G. L. Pérez, A. Torremorell, H. Mugni, P. Rodríguez, M. Solange Vera, M. do Nascimento, L. Allende, J. Bustingorry, R. Escaray, M. Ferraro, I. Izaguirre, H. Pizarro, C. Bonetto, **D. P. Morris** and H. Zagarese. 2007. Effects of the herbicide Roundup® on Freshwater Microbial Communities: A mesocosm Study. *Ecological Applications*, 17(8), 2310-2322.

Belmont, P., B.R. Hargreaves, **D.P. Morris**, and C.E. Williamson. 2007. Estimating attenuation of ultraviolet radiation in streams: Field and laboratory methods. *Photochemistry and Photobiology* 83: 1-9.

Galster, J. C., Pazzaglia, F. J., Hargreaves, B. R., **Morris, D. P.**, Peters, S. C., and Weisman, R. N., 2006, Land use effects on watershed hydrology: The scaling of discharge with drainage area: *Geology*, v. 34, p. 713-716.

Cooke, S.L., C.E. Williamson, B.R. Hargreaves, B.R., and **D.P. Morris**. 2006. Beneficial and detrimental interactive effects of dissolved organic matter and ultraviolet radiation on zooplankton in a transparent lake. *Hydrobiologia* 568: 15-28.

Maloney, K.O., **D.P. Morris**, C.O. Moses, and C.L. Osburn. 2005. The role of iron and dissolved organic carbon in the absorption of ultraviolet radiation in humic lake water. *Biogeochemistry*, 75:393-407.

De Lange, H., **D.P. Morris**, and C.E. Williamson. 2003. Solar ultraviolet photodegradation of DOC may stimulate freshwater food webs. *J. Plankton Research*. 25(1): 111-117.

Osburn C.L., **D.P. Morris**, K.A. Thorn, and R.E. Moeller. 2001. Chemical and optical changes in freshwater dissolved organic matter exposed to solar radiation. *Biogeochemistry*. 54(3): 251-278.

Osburn C.L., H.E. Zagarese, **D.P. Morris**, B.R. Hargreaves, and W. Cravero. 2001. Calculation of spectral weighting functions for the solar photobleaching of chromophoric dissolved organic matter in temperate lakes. *Limnology & Oceanography*. 46(6): 1455-1467.

Williamson, C.E., **D.P. Morris**, and M.L. Pace. 1999. Dissolved organic carbon and nutrients as regulators of lake ecosystems: Resurrection of a more integrated paradigm. *Limnology & Oceanography*. 44: 795-803.

Frost, T.M., P.K. Montz, T.K. Kratz, T. Badillo, P.L. Brezonik, M.J. Gonzalez, R.G. Rada, C.J. Watras, K.E. Webster, J.G. Winer, C.E. Williamson, and **D.P. Morris**. 1999. Multiple stresses from a single agent: Diverse responses to the experimental acidification of Little Rock Lake, Wisconsin. *Limnology & Oceanography*. 44: 784-794.

**Morris, D.P.** and B.R. Hargreaves. 1997. The role of photochemical degradation of dissolved organic carbon in regulating the UV transparency of three lakes on the Pocono Plateau. *Limnology & Oceanography*. 42: 239-249.

Ayoub, L.M., B.R. Hargreaves, and **D.P. Morris**. 1996. UVR attenuation in lakes: Relative contribution of dissolved and particulate material. *SPIE Ocean Optics XII*.

Williamson, C.E., R.S. Stemberger, **D.P. Morris**, T.M. Frost, and S. Paulsen. 1996. Attenuation of ultraviolet radiation in northeastern USA lakes. *Limnology & Oceanography*. 41:1024-1034.

**Morris, D.P.**, H. Zagarese, C.E. Williamson, E.G. Balseiro, B. Hargreaves, B. Modenutti, R. Moeller, C. Cueimalinos. 1995. The attenuation of solar UV radiation in lakes and the role of dissolved organic carbon. *Limnology & Oceanography*. 40: 1381-1391.

Kirk, J.T.O., B. Hargreaves, **D.P. Morris**, R. Coffin, B. David, D. Fredrickson, D. Karentz, M. Lesser, S. Madronitch, J.H. Morrow, N. Nelson, N. Sculley. 1994. Measurement of UV-b radiation in freshwater ecosystems. *Archiv. Hydrobiol.* 43: 71-99.

Karentz, D. M.L. Bothwell, R.B. Coffin, A. Hanson, G.J. Herndl, S.S. Kilham, M.P. Lesser, M. Lindell, R.E. Moeller, **D.P. Morris**, P.J. Neal, R.W. Saunders, C.S. Weiler, R.G. Wetzel. 1994. Impact of UVB radiation on pelagic freshwater ecosystems: Report of the working group on bacteria and phytoplankton. *Archiv. Hydrobiol.* 43:31-69.

**Morris, D.P.** and W.M. Lewis, Jr. 1992. Nutrient limitation of bacterioplankton growth in Lake Dillon, Colorado. *Limnology & Oceanography*. 37:1179-1192.

**Morris, D.P.** and W.M. Lewis, Jr. 1988. Phytoplankton nutrient limitation in Colorado mountain lakes. *Freshwater Biology*. 20: 315-327.

Lewis, W.M., Jr, T. Frost, and **D.P. Morris**. 1986. Studies of planktonic bacteria in Lake Valencia, Venezuela. Arch. Hydrobiol. 106: 289-305.

Lewis, W.M., Jr. and **D.P. Morris**. 1986. Toxicity of nitrite to fish: A review. Trans. Am. Fish. Soc. 115: 183-195.

### **C. Honors and Awards**

Dissertation of the Year Award. University of Colorado, College of Arts and Sciences, Boulder, Colorado (1990).

Graduate Student Teacher Excellence Award, College of Arts & Sciences, University of Colorado. (1990).

Noyes Foundation Research Fellowship, University of Colorado, Boulder (1985-1990).

Office of Naval Research Fellowship to study molecular probes in marine ecology, Marine Biological Laboratory, Woods Hole, MA (1989).

### **D. Research Funding:**

#### **Competitively Awarded Research Grants Active:**

“Pathways of Mercury Evasion from Contaminated Wetlands: A Globally Important Source of Atmospheric Mercury?” “Greater Research Opportunities: Persistent, Bioaccumulative Chemicals”, FY 2004 Science To Achieve Results (STAR) Program, National Center For Environmental Research. \$324,767 [2005-2008]. Peters (PI), Windham, **Morris (Co-PIs)**.

“Interactive effects of UV radiation and temperature on pelagic food webs” NSF IRC Program. \$219,706 [2005-2007]. **Morris Co-PI**. (*The amount reflects the sub-contract awarded to Lehigh for my part of the research grant after Williamson moved to Miami University*).

#### **Past Competitively Awarded Research Grants:**

“Assessing the interactive effects of landscape, climate, and UV radiation on river ecosystems: Modeling transparency to UV radiation and the response of biota”. EPA S.T.A.R. Program, \$825,850 [2002-2006]. **Morris (Lead PI)**, Pazzaglia, Williamson, Hargreaves, Weisman (Co-PIs).

"Enhanced ultraviolet-B radiation in natural ecosystems as an added perturbation due to ozone depletion". Inter-American Institute for Global change Research (IAI). \$800,000 [2000-2004]. **Morris (Co-PI)**.  
(Award to Lehigh was \$125,000)

"The causes and consequences of seasonal variation in UV transparency in lakes". NSF Ecosystems, \$690,117 [1997 to 2001]. **Morris (Lead PI)**, Williamson, Hargreaves, and Moeller (co-PIs).

"Attenuation of solar ultraviolet radiation in lakes of Southern Argentina". NSF Division of International Programs, \$38,700 [1997-1999], **Morris (Lead PI)**.

"The response of freshwater plankton communities to natural levels of ultraviolet radiation". NSF, DEB-9306978, \$250,000 [1993-1996], Williamson (PI), **Morris (Co-PI)**, Hargreaves, Moeller (co-PIs).

"UV-B radiation and zooplankton community structure across depth and elevation gradients in lakes". NSF Division of International Programs, \$29,852 [1993-1994], Williamson (PI), **Morris (co-PI)**.

#### **Competitively Awarded Training Grants:**

REU Site: "Field Research and Database Development in Freshwater Ecology". NSF-REU, \$162,536 [1996-1997], Moeller (PI) and **Morris (Co-PI)**.

### **E. Editorial Review Board Membership**

### **F. Scholarly Presentations**

#### **Workshops Organized & Presented**

"Microbial processes in shallow aquatic ecosystems." Workshop presented in conjunction with the Congreso Argentino de Limnologia, Camahue, Argentina, 2005.

#### **Conference Proceedings (published abstracts—presenter listed first):**

**Morris, D. P.** and P. Belmont. Penetration of UV radiation in streams of eastern Pennsylvania, USA: Trophic controls and the role of suspended sediments. American Society of Limnology and Oceanography, Orlando, FL, June 2008.

**Morris, D.P.**, W. Jeffrey, W. W. Sanders, J. M. Fischer, C. E. Williamson, and J. A. Porter. Effects of CDOM Additions and Photobleaching on Freshwater Microbial

Communities: Results from Large-Scale Mesocosms. Chapman Conference: Lakes and Reservoirs as Sentinels, Integrators, and Regulators of Climate Change. Lake Tahoe, September 2008.

Cooke, S. L., J. M. Fischer, C. E. Williamson, and **D. P. Morris**. Effects of Increased Dissolved Organic Matter on Zooplankton Vertical Distribution in a UV-Transparent Lake: Results from Large-Scale Mesocosms. Chapman Conference: Lakes and Reservoirs as Sentinels, Integrators, and Regulators of Climate Change. Lake Tahoe, September 2008.

Fischer, J.M., K. Kessler, R.W. Sanders, C.E. Williamson, W.H. Jeffrey, R.E. Moeller, **D.P. Morris**, J.A. Porter, P.A. Neale, J.E. Saros, S.L. Cooke, A.L. Macaluso, E.P. Overholt, J.D. Pakulski, D. Schoener, and C. Scott. Effects of CDOM addition on crustacean zooplankton in an oligotrophic lake: carbon and nutrient subsidy or UV screen? American Society of Limnology and Oceanography, Orlando, FL, June 2008.

Mason, C. and **D. P. Morris**. The assessment of dissolved organic matter biolability in lotic systems. American Society of Limnology and Oceanography, Orlando, FL, June 2008.

Porter, J.A., R.E. Moeller, A. Heinze, and **D.P. Morris**. 2008. Reactivity of Terrestrially Derived Dissolved Organic Matter in the Aquatic Ecosystem: Investigating Issues of Source, Biolability, Photolability, and Nutrient Composition. AGU Chapman Conference on Lakes and Reservoirs as Sentinels, Integrators, and Regulators of Climate Change, Lake Tahoe, CA.

Sanders, W. W., J. M. Fischer, A. W. Heinze, W. Jeffrey, A. L. Macaluso, R. E. Moeller, **D. P. Morris**, J. A. Porter, C. E. Williamson. Dissolved Organic Carbon (DOC) Forcing of Plankton Dynamics in a Lake Ecosystem. Chapman Conference: Lakes and Reservoirs as Sentinels, Integrators, and Regulators of Climate Change. Lake Tahoe, September 2008.

Porter, J.A., R.E. Moeller, A. Heinze, and **D.P. Morris**. 2008. Exposure of Terrestrial Dissolved Organic Matter to Ultraviolet Radiation Increases the Metabolic Potential of Freshwater Bacterial Communities. 108<sup>th</sup> General Meeting of the American Society for Microbiology.

Peters, S.C., Wollenberg, J.L., **Morris, D.P.**, Porter, J.A.. 2007. Mercury Emission to the Atmosphere from Experimental Manipulation of DOC and UVR in Mososcale Field Chambers in a Freshwater Lake. Eos Trans. AGU, 88(52), Fall Meeting Suppl., Abstract B13F-07.

Belmont, P., Pazzaglia, F.J., and **Morris, D.P.** 2007. Strong geomorphic controls on stream optical environments in eastern Pennsylvania GSA National Meeting. Denver, CO.

**Morris, D.P.** 2007. Variability in the rate of CDOM photobleaching and its control in the Lehigh River, Pennsylvania, USA. ASLO Aquatic Sciences Meeting, Santa Fe, NM.

Porter, J.A., R.E. Moeller, and **D.P. Morris**. 2007. Response of microbial communities to dissolved organic matter of a terrestrial nature: Implications of ultraviolet radiation exposure. ASLO Aquatic Sciences Meeting, Santa Fe, NM.

Sanders, R.W., W.H. Jeffrey, R.E. Moeller, **D.P. Morris**, and J.A. Porter. 2007. Microbial communities across a gradient of dissolved organic carbon (DOC): Results from mesocosm experiments. ASLO Aquatic Sciences Meeting, Santa Fe, NM.

Belmont, P., B.R. Hargreaves, and **D.P. Morris**, 2006. Empirical model for estimating attenuation of ultraviolet radiation in streams. NABS Annual meeting, Anchorage, Alaska.

Kendig, C.A., J.A. Porter, **D.P. Morris**, B.R. Hargreaves, and S. C. Peters. 2006. Laboratory manipulation of lake water chemistry to examine changes in the spectral properties of chromophoric dissolved organic matter. ASLO Aquatic Sciences Meeting, Victoria, B.C. (*Kendig was an undergraduate student whom I advised on a senior honors thesis.. Her work was honored as ASLO's top undergraduate poster at this meeting*).

Moeller, R.E., B.R. Hargreaves, **D.P. Morris**, and C.E. Williamson. 2006 Correlations of rainfall, DOC, and water chemistry to decreasing trends of UV transparency in two slightly acidic lakes of Pennsylvania. ASLO Aquatic Sciences Meeting, Victoria, B.C.

**Morris, D.P.**, Zagarese, H.E. and Hargreaves, B.R. 2006 Variability in the rate of CDOM photobleaching and its control. ASLO Aquatic Sciences Meeting, Victoria, B.C.

Porter, J.A., **Morris, D.P.** 2006. The role of ultraviolet radiation in the assimilation and fate of allochthonous dissolved organic carbon. ASLO Aquatic Sciences Meeting, Victoria, B.C.

Ferraro, M., **D.P. Morris**, H. Zagarese, B.R. Hargreaves, D. Soto, J. Jaramillo, P. Perez, Patricia<sup>1</sup>, and A. Suarez Diego. 2005. Variability of the rate of CDOM photobleaching and its control in lakes. Chilean Limnological Congress, Puerto Montt, Chile.

Hargreaves, B.R. **D.P. Morris**, F.J. Pazzaglia, R. N. Weisman, C. E. Williamson, S.C. Peters. 2005. Assessing the effects of land use, climate, and UV radiation on river ecosystems in northeastern USA, EPA STAR Project Review (Washington DC).

**Morris, D.P.** 2005. Control and consequences of CDOM photobleaching across a variety of aquatic ecosystems. Congreso Argentino de Limnología, Camahue, Argentina. [Invited keynote talk].

Porter, J.A. and **D.P. Morris**. 2005. The effect of photobleaching chromophoric dissolved organic matter on aquatic microbial communities: a mesocosm study. Annual Meeting of ASLO, Salt Lake City, UT.

Belmont, P. and **D.P. Morris**. 2004. Attenuation of ultraviolet radiation in several small Pennsylvania streams. North American Benthological Society. Vancouver, Canada.

Cooke, S.L., C.E. Williamson, **D.P. Morris**, and B.R. Hargreaves. 2004. Allochthonous dissolved organic matter and UV radiation alter zooplankton community structure in a transparent lake. Ecological Society of America, Portland, OR.

Hargreaves, B.R., C.W. Forstall, L.M. Nichols, **D.P. Morris**, F.J. Pazzaglia, C.E. Williamson, and R.N. Weisman. 2004. "Lake model for ultraviolet attenuation adapted to streams." International Society of Limnology (SIL), Finland, August 2004.

**Morris, D.P.**, B. Hargreaves, F. Pazzaglia, R. Weisman, C. Williamson, 2004. Assessing the interactive effects of landscape, climate, and UV radiation on river ecosystems: Modeling transparency to UV radiation and the response of biota. EPA STAR Symposium, Washington DC.

**Morris, D.P.** and D.B. Frisbie. Photobleaching potential of CDOM in the Lehigh River, Pennsylvania. 2004. North American Benthological Society. Vancouver, Canada.

Belmont, P. and **Morris, D.P.** 2003. Initial inspection of spatial and temporal variables influencing the attenuation of ultraviolet radiation in streams. NEEC, Rutgers University, NJ.

Moeller, R.E., B.R. Hargreaves, **D.P. Morris**, C.E. Williamson, 2003. Seasonal, year-to-year and long term controls of UV attenuation in two mid-latitude lakes of contrasting wetland drainage and dissolved organic carbon content. ASLO Aquatic Sciences Meeting, Salt Lake City.

Osburn, C.L., Pohlman, J.P., Boyd, T.J, **Morris, D.P.**, and Coffin, R.B. (2002) Molecular and optical changes in dissolved organic matter from exposure to ultraviolet radiation. ASLO Aquatic Sciences Meeting, Albuquerque, NM.

Osburn, C. L., **Morris, D. P.**, Hargreaves, B. R., Coffin, R. B., and Boyd, T. J. (2002) Photochemical reactivity of chromophoric dissolved organic matter in lakes and the coastal Atlantic Ocean. Annual Meeting of the American Society of Photobiology, Quebec City, Quebec (INVITED).

Hargreaves, B.R., Osburn, C.L., **Morris, D.P.**, and Moeller, R.E. (2001) Spectral slope response to solar and biotic processes: predictions of a photobleaching model and estimates from CDOM absorption and UV attenuation measurements. ASLO Aquatic Sciences Meeting.

Osburn, C.L., **Morris, D.P.**, Hargreaves, B.R., and Zagarese, H.E. (2001) Modeling the contribution of UV radiation to the photobleaching of CDOM in temperate lakes from North and South America. ASLO Aquatic Sciences Meeting.

DeLange, H.J., **D.P. Morris**, and C.E. Williamson. 2000. The interaction between ultraviolet radiation, DOC, and zooplankton in freshwater. American Society for Limnology and Oceanography, Copenhagen, DK.

Hargreaves, B.R., **D.P. Morris**, R.E. Moeller, C.E. Williamson. 2000. Seasonal variation of ultraviolet transparency in lakes. International meeting of ASLO, Copenhagen.

Hargreaves, B. R., C. Sopka, and **D. P. Morris**. 2000. Water column experiments with CDOM: Seasonal changes in photochemical reactivity and daily photobleaching rates. EOS, ASLO/AGU Ocean Sciences Meeting, San Antonio.

**Morris, D.P.** 2000. The influence of photobleaching and microbial processing of DOM On UV optical properties of 2 lakes in northeastern Pennsylvania. International Chemical Congress of Pacific Basin Societies, Honolulu.

Osburn, C.L., **Morris, D.P.**, and Bebout, G.E. 2000. Seasonal production and photooxidation of CDOM in temperate lakes: evidence from stable isotopes. AGU/ASLO Ocean Sciences, OS21K-10.

Osburn, C.L., **D.P. Morris**, and B.R. Hargreaves. 2000. Spectral dependence of photobleaching of CDOM in lake ecosystems. International Chemical Congress of Pacific Basin Societies, Honolulu.

Kresge, K.G. and **D.P. Morris**. 1999. Bacteria, UVR, and DOC: A complex interaction in freshwater lakes. Annual Meeting of the American Society for Limnology and Oceanography, Santa Fe, NM.

**Morris, D.P.** 1999. A bioreactor design for the determination of microbially labile dissolved organic carbon. Proceedings of the International Society of Environmental Toxicology and Chemistry. Philadelphia.

Osburn, C.L., **D.P. Morris**, and B.R. Hargreaves. 1999. Modeling the spectral dependence of photooxidation of dissolved organic matter using absorbance and fluorescence. Annual Meeting of the American Society for Limnology and Oceanography, Santa Fe, NM.

**Morris, D.P.** and B.R. Hargreaves. The role of solar photochemical degradation of DOC in regulating the UV transparency and spectral characteristics of the surface waters of lakes. Proceedings of the International Society of Environmental Toxicology and Chemistry. Charlotte, NC. November 1998

**Morris, D.P.** The role of solar UV radiation in the production and utilization of labile dissolved organic carbon". Proceedings of the 8th International Symposium on Microbial Ecology. Halifax, Nova Scotia, August 1998.

**Morris, D.P.** and B.R. Hargreaves. "The role of photochemical degradation of dissolved organic carbon in regulating UV transparency of lakes. Gordon Research Conference, 1996. Environmental Sciences: Water.

**Morris, D.P.** and C. Stackpole. Photolytic changes in the lability and optical properties of DOC following exposure to solar UV radiation. 1996 Annual Meeting of the American Society for Limnology and Oceanography, Madison, WI.

## **G. Teaching and Research Advising**

### **EES Major Courses Taught:**

EES-25, The Environment and Living Systems (3). New gateway offering in EES developed during fall of 2006. (Enrollment F/06 23 students; F/07 42 students).

EES-31/32, Introduction to Environmental and Organismal Biology (4). Approximate enrollment of 80 undergraduate students (lectures and labs). Taught every fall semester between 1994 and 2005.

EES-371 Methods in Water Quality Analysis (4) (a.k.a EES-257 between 2004 and 2007 and EES-354 prior to 2004). Approximate enrollment of 8 undergraduate and graduate students. Taught every spring Semester since 1995. Includes lectures, laboratories and writing intensive components.

EES-358 Microbial Ecology (a.k.a EES-259 between 2004-2006 and EES-356 prior to 2003). Approximately 12 undergraduate and graduate students. Taught alternate fall semesters since 1995. The course integrates material from a variety of disciplines in biology, geology, and environmental sciences.

EES-384 Lake Ecosystems (4). Typically taught to 6 students at residential field site at the Lacawac Sanctuary. Course was co-taught with Hargreaves and Moeller. I was responsible for some budgeting, course promotion, planning, as well as 1/3 of course content. The course has been inactive for several years.

EES-484 Aquatic Ecosystems (3). Taught to approximately 8 graduate students alternating fall semesters. Co-taught with Williamson, Hargreaves, Yu, and Windham. I am responsible for 20% of course content.

EES-453, Advanced Topics in Microbial Ecology. Typically taught alternate spring semesters to approximately 5 graduate students.

### **Non-Major Courses:**

ES-122 Sustainable Development: The Costa Rican Experience (formerly Arts 196). Course is typically taught to 12-15 undergraduate students. This multidisciplinary course explores sustainable development from the aspects of ecology, economics, political science, and sociology. The course meets in classroom sessions during the fall semester and visits Costa Rica during the winter term. This course was developed *de novo* by Morris and Weisman and has been offered each winter term since 1998 (except 2004). Responsibility for course content, itinerary, budgeting, and planning is shared equally by the instructors (Morris & Weisman).

Arts-1 (2001 & 2004)

### **Non-Research Advising:**

I have typically advised 3-5 EES majors at any time since 1994.

### **Senior Honors Thesis Advising (as primary advisor):**

Kirsten Wert (EES-393, 2006-2007): “*Water quality and amphibian species abundance and reproduction at Lehigh Gap Refuge*”.

Catherine Kendig (EES-393, 2005-2006): “*Effect of lake water chemistry on spectral properties of chromophoric dissolved organic matter: A laboratory study*”.

David Franklyn (EES-383, LEO intern 2003): “*Nutrient dynamics of soil pore water entering a bog*”.

Lora Sterner (EES-383, 2003): “*Methods development for measuring organic carbon biolability of the Lehigh River*”.

Jeff Santacrocce (EES-383, 2002): “*Nutrient dynamics of the Lehigh River*”.

Cliff Buck (EES-383 2000-2001): “*Nutrient dynamics of the Lehigh River*”.

Taryn Filo (EES-383 1998-1999): “*Nutrient dynamics of the Lehigh River*”.

Jessica Fulton (EES-381, 1994-1995): “*Stimulation of bacterial production by UV-induced photooxidation products*”.

### **Undergraduate Internships & Research Advising (non-thesis):**

Deanna Guistino (EES-293, laboratory intern, sp 2008)  
Terri O'Brian (EES-293, Natural History of Costa Rica, sp. 2008)  
Shanacy Marler (EES-293, laboratory intern, 2007)  
Danielle Iuliucci (EES-293, laboratory intern, 2007)  
Alicia Morse (EES-293, laboratory intern, 2007)  
Michael Flanagan (EES-293, LEO intern, 2006-2007)  
Jenny Lafaro (EES-292 laboratory intern, 2006-2007)  
Bridget Mehr (EES-292 laboratory intern, 2006-2007)  
James Mikochink (summer intern on my EPA project, 2006)  
Pamela Slater (summer intern on my EPA project, 2005)  
Brian Babcock (summer intern on my EPA project, 2004)  
Adam Kovacs (summer intern on my EPA project, 2004)  
Dana Berkowitz (summer intern on my EPA project, 2003)  
Andrew Drabick (summer intern on my EPA project, 2003)  
Christopher Forstall (summer intern on my EPA project, 2003)  
Karen Miranda (summer intern on my EPA project, 2003)  
Lisa Nichols (summer intern on my EPA project, 2003)  
Amy Shotmeyer (EES-293, LEO intern, 2003)  
Eric Bowman (EES-293, 2002)  
Paul Marzen (EES-293, 2002)  
Eric Rath (EES-293, 2002)  
Jon Trengue (EES-293, 2002)  
Dani Frisbe (EES-393, 2001)  
Laura Guziak (LEO summer intern, 2001)  
Joe Oberlander (LEO summer intern, 2001)  
Patrick Hollander (EES-283, 2000)  
Sarah Lopez (EES-283, 2000)  
Kathrine Tran (LEO summer intern, 2000)  
Mary Heitzman (EES-283, 1998-1999)  
Ed Hubbert (EES-283, 1998-1999)  
Erin Sadlowski (EES-283, 1998-1999)  
Matt Lawson (EES-283, 1997-1998)  
Chris Bakker (EES-383 & summer REU internship, 1997)  
Maria Diaz (EES-383, 1997)  
Christine Stackpole (EES-383 & summer intern, 1995-1996)  
Lori Stonebeck (EES-381 & EES-383, 1995-1996)  
Chelsea Walker (EES-381, 1995-1996)  
Spero Michailidis (summer intern, 1995)  
Adrian Switzer (EES-381, 1995)

### **Masters Research Advising (as primary advisor):**

Laura Sterner (2003 to 2004). “*Measuring the organic carbon biolability of the Lehigh River using plug-flow biofilm reactors*”. Sterner is currently a project coordinator for a major environmental consulting firm.

Dani Frisbie (2002-2003). “*The photobleaching potential of the Lehigh River at Bethlehem, Pennsylvania*”. Frisbie is currently a project coordinator for a major environmental consulting firm.

Patrick Belmont (2001-2003). “*Penetration of ultraviolet radiation in streams of eastern Pennsylvania: topographic controls and the role of suspended particulates*”. Belmont continued in Ph.D. program in EES.

Taryn Filo (1999-2000; Co-advised with C. Moses ). “*A synoptic, watershed approach to TMDL’s*”. Filo is currently the women’s diving coach at Lehigh University.

Lore Ayoub (1995-1997; co-advised with B. Hargreaves). “*UV attenuation in lakes: Relative contributions of particulate and soluble material*”. Ayoub is currently in Ph.D. program at the University of Maryland)

Kathy Kresge (1994-1996). “*The impact of UV radiation on bacterial growth in lakes of the Pocono Plateau*”. Kresge continued in Ph.D. program in EES.

Christopher Dempsey (2007 to present)

Christopher Mason (2006 to 2008). “*Calibrating plug-flow bioreactors as a tool for assessment of dissolved Organic matter biolability in lotic systems*”.

Christopher Dempsey (2007 to present)

### **Doctoral Research Advising (as primary advisor):**

Patrick Belmont (2003 to 2007; co-advised with F. Pazzaglia) “*Landscape Evolution and aquatic Ecology: Longterm sediment dynamics and landscape influences in stream ecosystems.*” Belmont is currently in a post doctoral position with NCED at the University of Minnesota.

Kathy Kresge (1996-2001) “*Bacterioplankton, DOM, and UVR: A complex interaction in lakes*”. Kresge is currently has a faculty position in the Biology Department at Northampton Community College.

Chris Osburn (1995-2000) “*Photochemical changes in the dissolved organic matter of Temperate Lakes: Implications for organic matter cycling and lake*

*transparency*". Osburn is currently a staff scientist at the Office of Naval Research.

## **H. Service**

### **University:**

Global Citizenship Advisory Board (2005-2007)  
Phi Beta Delta (2000 vice president; 2001 president)  
Director, Lehigh Aquatic Ecosystems Program (1998-present)  
Hugh BASD/LU Science Enrichment Program (1996-2001)  
Faculty Compensation Committee (1996-1999)  
Institutional Bio-Safety Committee (1995-2002)  
Nominations Committee (1995, 1996 chair)

### **College:**

CAS Tenure Committee (2006, Chair in 2007 & 2008)  
CAS Graduate Fellowship Committee (2004 to 2008)  
CAS Dissertation Awards Committee (2005 to 2008)  
Arts 1 Faculty (1995, 2004)  
Mentor for the CAS new faculty member mentoring program (2003-2004)  
Candidate's Day participant (2000-2001)  
CAS Summer Freshman Advisor (2000-2003)  
Candidate's Day participant (2000, 2001, 2004, 2005)

### **Service to University's Interdisciplinary Programs:**

Bioengineering/Life Science Initiative Committee (2003 to 2006)  
Soil Fate & Transport Faculty Search Committee (CEAS/EI, 2003)  
Environmental Initiative (EI) Graduate Committee (2003)  
Environmental Initiative (EI) Undergraduate and Outreach committee (2002)  
Environmental Initiative (EI) Curriculum and Research committees (2000-2001)  
Lehigh Earth Observatory Operating Board (2001-2002)  
Lehigh Earth Observatory Operating Board (1999-2000)

### **Department Service:**

#### **Major department committees**

Undergraduate Instruction Committee (1995; 2002 to present)  
Chair, Environmental Science Search Committee (2005-2006, Booth hire)  
Geochemistry/hydrology Search Committee (2001, Peters hire)  
Environmental Science Search Committee (2000, Yu hire)  
Ecology Search Committee (1999, Windham hire)

Plant Ecology Search Committee (1998, Fritz hire)  
Graduate Instruction Committee (1995-2000; chair 1997-1998)

**Minor department committees:**

Department Field Trip Committee (Chair, 2007 to present)  
E.I. Ecology B.S. Committee (2006 to present)  
Committee to internationalize EES curriculum (2007 to present)  
Field Programs Committee (2005 to 2007)  
Hewlett Foundation Integrated Field Trip Committee (2000)  
Ad Hoc Committee on Personnel (1997)  
EES Club advisor (1995-1996)  
Williams Hall Renovation Committee (1996)  
P.C.L.P Steering Committee (1995)  
Williams Hall Safety Committee (1995-1996)  
Williams Hall Space Committee (1995)

**Professional Service:**

Advisory Panel for Inter-American Institute for Global Change Research (1999-2007)

Workshop organizer/presenter: "Microbial processes in shallow aquatic ecosystems."  
Workshop presented in conjunction with the Congreso Argentino de Limnologia,  
Camahue, Argentina, 2005.

The American Society of Limnology and Oceanography: Lifetime achievement award  
committee member (2001- 2005).

Panel Member for NSF Division of Biological Science REU Site Program (1998-2002).

Frequent reviewer of proposals for: NSF Ecosystem Studies Program, Ecology Program,  
and Polar Biology Program (1995- present).

Frequent manuscript review for: AGU Water Studies Monograph, Biogeochemistry,  
Freshwater Biology, Limnology & Oceanography, Archiv für Hydrobiologie,  
Photochemistry and Photobiology, Great lakes Research and Science (1995-present).