

# Leslie McCabe Shor

---

191 Auditorium Drive  
Storrs, CT 06269-3222  
Leslie.shor@uconn.edu

Office: (860) 486-3136  
  
www.leslieshor.com

## EDUCATION

---

- 2002 Ph.D. Chemical and Biochemical Engineering, Rutgers, The State University of New Jersey, New Brunswick NJ. *NIH Biotechnology Training Fellowship* (3 yrs).
- 1999 M.S. Chemical and Biochemical Engineering, Rutgers, The State University of New Jersey, New Brunswick NJ.
- 1996 B.A. *with high distinction*, Chemistry and Environmental Sciences (double major), University of Virginia, Charlottesville VA.

## ACADEMIC APPOINTMENTS

---

- 2009-present Northeast Utilities Assistant Professor in Environmental Engineering Education, Department of Chemical, Materials and Biomolecular Engineering, University of Connecticut, Storrs CT.  
Graduate Faculty: Environmental Engineering  
Center Faculty: Center for Environmental Science and Engineering  
Affiliated Faculty: Institute for Materials Science
- 2005-2009 Research Assistant Professor, Department of Civil & Environmental Engineering, Vanderbilt University.  
Affiliated Faculty, Vanderbilt Institute for Integrative Biosystems Research and Education (VIIBRE), Vanderbilt University, Nashville TN.
- 2002-2004 Post-Doctoral Research Associate, Department of Civil & Environmental Engineering, Vanderbilt University. Supervisor: Eugene J. LeBoeuf.

## RESEARCH INTERESTS

---

- **Environmental Biotechnology.** Systematic replication of micro-structured microbial habitats and micro-analysis of biological responses to controlled extracellular habitat conditions.  
*Applications: Biotechnology optimization. High-throughput drug, toxicity screening.*
- **Contaminant Fate & Transport.** Fate and transport of hydrophobic organic contaminants, especially PAHs, spanning micro-scale interfacial processes to regional modeling.  
Environmental impacts of nanoparticles in estuaries: bioavailability, toxicity, risk assessment.  
*Applications: Environmental impacts of energy production; impacts of emerging contaminants, including nanoparticles, on water resources sustainability.*

## GRANTS

---

### Federal Awards

- NSF "EAGER: Field-deployed Microfluidic Trap Array for Discovery and Observation of Microbial Eukaryotes." PI: L.M. Shor. DBI Instrument Development for Biological Research (IDBR) program, NSF #1027125. \$160,000, 5/1/10-4/30/12.
- NSF "EcoChip: A Micro-structured Microbial Habitat Array." PI: L.M. Shor. Co-PIs E.J. LeBoeuf, G.L. Taghon, L.Y. Young. DBI Instrument Development for Biological Research (IDBR) program, NSF #0649883. \$397,910, 5/1/07-4/30/10.
- NSF "REU: EcoChip: A Micro-structured Microbial Habitat Array." PI: L.M. Shor. NSF #0749018. \$30,150, 5/1/07-4/30/10. (*Research co-op program with local community college.*)

## Other Competitive Awards

- “High-Throughput Assay to Measure Innate and Induced Antibiotic Resistance in Biofilms,” PI Leslie M. Shor, UConn Large Faculty Grant. \$24,000, 1/1/2011-12/31/2011.
- “Pore Scale Effects of Soil Structure and Microbial Interactions on Soil Water Retention,” PI Leslie M. Shor, UConn Center for Environmental Science & Engineering, Graduate Student Research Assistantship Program. (*Provides 1 semester GA, spring 2011*)
- “A Microfluidic Infection Thread Assay to Study Initiation of Symbiotic Nitrogen Fixation,” PI Leslie M. Shor, Co-PI Daniel Gage. UConn Center for Environmental Science & Engineering, Graduate Student Research Assistantship Program. (*Provides 1 semester GA, spring 2010*)
- “Leachate test methods for the evaluation of the effectiveness of in-situ stabilization of soil material at former MGP sites.” PI: Andrew Garrabrants; Co-PI: Leslie Shor. Electric Power Research Institute (EPRI). \$166,250. 2/15/06-12/30/08.

## PATENTS

---

### Patents

- L.M. Shor, A.C. Garrabrants, D.S. Kosson. “Device for Leaching Extraction and Assessment” US. Patent No. 7,930,948, Serial No. 12/185,799.

## PUBLICATIONS

---

### Peer Reviewed Journal Articles

- Markov DA, PC Samson, DK Schaffer, A Dhummakupt , JP Wikswo, LM Shor. 2010. Window on a Microworld: Simple Microfluidic Systems for Studying Microbial Transport in Porous Media. *Journal of Visualized Experiments* (JoVE). 39.
- Markov, D.A., S. Manuel, L.M. Shor, S. Opalenik, J.P. Wikswo, and P. Samson. 2010. Tape-underlayment, rotary-node (TURN) valves for simple on-chip microfluidic flow control. *Biomedical Microdevices*. 12(1):135-44.
- Rodenburg, L.A., S.N. Valle, M.A. Panero, G.R. Muñoz, and L.M. Shor. 2010. Mass Balances on Selected Polycyclic Aromatic Hydrocarbons (PAHs) in the NY/NJ Harbor. *Journal of Environmental Quality*. 39:642-653.
- Wang, W., L.M. Shor, E.J. LeBoeuf, J.P. Wikswo, G.L. Taghon and D.S. Kosson. 2008. Protozoa migration in bent microfluidic channels. *Applied and Environmental Microbiology*, 74(6) 1945-1949.
- Wang, W., L.M. Shor, E.J. LeBoeuf, J.P. Wikswo, and D.S. Kosson. 2005. Mobility of protozoa through narrow channels. *Applied and Environmental Microbiology*, 71(8) 4628-4637.
- Shor, L.M., K.J. Rockne, L. Y. Young, G.L. Taghon, and D.S. Kosson. 2004. Combined effects of contaminant desorption and toxicity on risk from PAH contaminated sediments. *Risk Analysis: An International Journal*, 24(5) 1109-1120.
- Shor, L.M., W. Liang, K.J. Rockne, G.L. Taghon, L. Y. Young, and D.S. Kosson. 2003. Intra-aggregate mass transport-limited bioavailability of polycyclic aromatic hydrocarbons to *Mycobacterium* strain PC01. *Environmental Science & Technology*, 37(8) 1545-1552.
- Shor, L.M., K.J. Rockne, L. Y. Young, G.L. Taghon, and D.S. Kosson. 2003. Desorption kinetics for field-aged polycyclic aromatic hydrocarbons from sediments. *Environmental Science & Technology*, 37(8) 1535-1544.
- Rockne, K.J., L.M. Shor, L. Y. Young, G.L. Taghon and D.S. Kosson. 2002. Distributed sequestration and release of PAHs in weathered sediment: The role of sediment structure and organic carbon properties. *Environmental Science & Technology*, 36(12) 2636-2644.

### Refereed Reports

- Garrabrants, A.C., L.M. Shor, D.S. Kosson, R.N.J. Comans, A. van Zomeren, H.A. van der Sloot, O. Hjelm, E.A. Hansen, and A. Coleman. 2007. “Leaching Assessment Methods for the

Evaluation of the Effectiveness of In-Situ Stabilization of Soil Materials at Manufactured Gas Plant Sites” Electric Power Research Institute (EPRI), Palo Alto, CA. 1014062.

Valle, S.N., M.A. Panero, and L. M. Shor. 2007. “Pollution prevention and management strategies for polycyclic aromatic hydrocarbons in the New York/New Jersey Harbor.” New York Academy of Sciences, Harbor Consortium. New York, N.Y.

Comans, R.N. J., G. Roskam, A. Oosterhoff, L.M. Shor, M. Wahlstrom, J. Laine-Ylijoki, M. Pihlajaniemi, M. Ojala, K. Brokholm, K. Vilholth, O. Hjelm, P. Daly, R. Woodhead, J. Higgins, T. Heimovaara, J. Keijzer, and H. Keijzer. 2001. Development of standard leaching tests for organic pollutants in soils, sediments, and granular waste materials. European Commission, Brussels, Belgium.

### **Book Chapters**

Bossert, I.D., L.M. Shor, and D.S. Kosson. 2001. “Methods for measuring hydrocarbon biodegradation in soils,” in C.J. Hurst, R.L. Crawford, G.R. Knudsen, M.J. McInerney, and L.D. Stetzenbach (eds.) *Manual of Environmental Microbiology*, 2<sup>nd</sup> Ed. ASM Press, Washington D.C. pp. 934-943.

Shor, L.M. and D.S. Kosson. 2000. “Bioavailability of organic contaminants in soils,” in J.J. Valdes (ed.) *Bioremediation*. Kluwer Academic Publishers, Dordrecht pp.15-43.

### **Conference Proceedings**

Shor, L.M. 2009. “Towards Predicting Impacts of Nanomaterials in the Environment.” Proc. of American Institute of Chemical Engineers (AIChE) National Meeting. Nashville TN.

Shor, L.M. Rodenburg, L.A., S.N. Valle, M.A. Panero, G.R. Muñoz. 2009. “Challenges to Water Quality Sustainability From Chronic PAH Pollution in An Urban Estuary.” Proc. of AIChE National meeting, Nashville TN.

Young, L.Y., W. Liang, L.M. Shor, D.S. Kosson, K.J. Rockne, and G.L. Taghon. 2002. Bioavailability of PAHs to bacteria in estuarine sediment. *Soil and Sediment Contamination*. 11(3) 488.

Kosson, D.S., L.M. Shor, K.J. Rockne, W. Liang, G.L. Taghon, and L.Y. Young. 2000. Mass transfer limitations on bioavailability of PAHs from contaminated estuarine sediments.” *American Chemical Society, Division of Environmental Chemistry*, 40 (2), 202-204.

### **Dissertation**

L.M. Shor. 2002. “Bioavailability of Polycyclic Aromatic Hydrocarbons in Two Estuarine Sediments: Decoupling Biological, Physical and Chemical Processes.” Rutgers, The State University of New Jersey. Committee Members D.S. Kosson (Chair), B. Narasimhan, H. Pedersen, K.J. Rockne, G.L. Taghon, L.Y. Young.

## **PRESENTATIONS**

---

### **Invited Presentations**

“Microfluidic Devices as Engineered Habitats for Microbes.” University of Connecticut, Department of Marine Sciences, Groton Point CT. March 5, 2010.

“Microfluidic Devices as Engineered Habitats for Microbes.” University of Connecticut, Environmental Engineering Program, Storrs CT. March 26, 2010.

“Microfluidic Devices as Micro-structured Microbial Habitat Arrays.” Instituto Tecnológico y de Estudios Superiores de Monterrey, ITESM, Monterrey Mexico. January 19, 2010.

“Undergrads in Instrument Labs: Strategies for Constructive Involvement of Undergraduate Researchers in Instrument Development Projects.” NSF Critical Needs in Instrument Development for Biological Research Workshop, September 19-21, 2008, Arlington VA.

“Pollution Prevention and Management Strategies for Polycyclic Aromatic Hydrocarbons in the New York/New Jersey Harbor.” New York Academy of Sciences (NYAS) Harbor Consortium. June 8, 2005, November 18, 2005, April 6, 2006, December 1, 2006, June 7, 2007, New York N.Y.

“Lessons from Athena: Women in Academic Careers.” Women in Academic Careers Track, Society of Women Engineers (SWE) National Conference, October 24-26, 2007, Nashville TN.

"How to Prepare For, Obtain, and Succeed In a Career in Research." Society of Women Engineers (SWE) National Conference, October 24-26, 2007, Nashville TN.

#### **Oral Presentations**

- Shor, L.M., G.M. Bouchillon, A. Dhummakupt, J.F. Chau. "Spatial and Temporal Patterns of Protozoa Migration within Micro-structured Landscapes." General Meeting of the American Society for Microbiology (ASM), May 21-24 2011, New Orleans LA. (Selected for "Young Investigator" presentation.)
- Shor, L.M. "Towards Predicting Impacts of Nanomaterials in the Environment." American Institute of Chemical Engineers (AIChE) National Meeting, November 2009, Nashville TN.
- Shor, L.M. Rodenburg, L.A., S.N. Valle, M.A. Panero, G.R. Muñoz. "Challenges to Water Quality Sustainability From Chronic PAH Pollution in An Urban Estuary." AIChE National meeting, November 2009, Nashville TN.
- Shor, L.M., Y. Li, P. Samson, D. Markov, and E.J. Leboeuf. "Microbial Transport in Porous Media Using Microfluidic Flow Cell Arrays." 1<sup>st</sup> International Conference on Microbial Transport and Survival in Porous Media, May 2009, Niagra-on-the-Lake, ON.
- Shor, L.M. "Screening Impacts of Nanomaterials in the Environment." American Institute of Chemical Engineers (AIChE) Spring Meeting, April 2009, Tampa FL.
- Shor, L.M., Vanessa Allwardt, and P. Samson. "Microfluidic Devices as Micro-structured Microbial Habitat Arrays." American Society for Microbiology (ASM) KY-TN Meeting, October 2008, Henderson TN.
- Shor, L.M., W. Wang, E.J. LeBoeuf, and D.S. Kosson, "Mobility of Protozoa through Narrow Channels." 7<sup>th</sup> *Biennial Symposium of the International Society of Environmental Biotechnology*, June 2004, Chicago IL.
- Shor, L.M., D.S. Kosson, K.J. Rockne, L.Y. Young, and G.L. Taghon, "Synergistic Effects of Contaminant Desorption and Toxicity: Implications for Environmental Risk Assessment." *Society for Risk Analysis Annual Meeting*, December 2002, New Orleans LA.
- Shor, L.M., K.J. Rockne, D.S. Kosson, and S. Erdal, "Assessment of Cancer Risks for Recreational Populations Exposed to PAH-Contaminated Sediments and Biota in the New York/New Jersey Harbor Estuary: A Probabilistic Approach." *Society for Risk Analysis Annual Meeting*, December 2000, Arlington VA.
- Shor, L.M., K.J. Rockne, W. Liang, G.L. Taghon, D.S. Kosson, and L.Y. Young, "Mass Transfer Limited Biodegradation and Long-Term Release of PAHs from Contaminated Sediments." *Society of Environmental Toxicology and Chemistry 21<sup>st</sup> Annual Meeting*, November 2000, Nashville TN.
- Shor, L.M., K.J. Rockne, W. Liang, D.S. Kosson, L. Y. Young, and G.L. Taghon, "Factors Controlling Desorption and Bioavailability of PAHs in Size- and Density-Fractionated Field-Aged Contaminated Estuarine Sediments." *17<sup>th</sup> Annual International Conference on Contaminated Soils, Sediments and Water*, October 2000, Amherst MA.

#### **Other Selected Presentations (2008-present)**

- J.F. Chau, G.M. Bouchillon, L.M. Shor. "Linking Form, Function, and Molecular Taxonomy: Microfluidic Trap Arrays to Study Protozoan Biogeography." General Meeting of the American Society for Microbiology (ASM), May 21-24 2011, New Orleans LA. (J.F. Chau selected for "Young Investigator" oral presentation.)
- J.F. Chau, G.M. Bouchillon, L.M. Shor. "Microbial trap array for in situ determination of natural carbon cycling." American Chemical Society (ACS) National Meeting, Anaheim CA March 27-31.
- Shor, L.M. "Micro-structured Microbial Habitats." Microenvironments Modulating Biological Interactions in the Ocean symposium, January 16-21, 2011, Aspen CO.
- Chau, J.F., G.M. Bouchillon, L.M. Shor. "Linking Form, Function, and Molecular Taxonomy: Microfluidic Trap Arrays for Microbial Eukaryotes." The 8th Annual Ecological Genomics Symposium, November 5 - 7, 2010, Kansas City MO
- Dhummakupt\*\*, A., P.C. Samson, D. Markov, J.P. Wikswo, and L.M. Shor, Measuring Oxygen Concentration Under *Staphylococcus aureus* Biofilms in Response to Chemical Gradients in

- a Microfluidic Device, in Biomedical Engineering Society Annual Meeting, October 2010, Austin, TX.
- Markov, D.A., P.C. Samson, D.K. Schaffer, A. Dhummakupt, J.P. Wikswow, and L.M. Shor, Window into a Microworld: microfluidic system for studying microbial growth in porous media, in Biomedical Engineering Society Annual Meeting, October 2010, Austin, TX.
- McNew, Coy P., Eugene J. LeBoeuf, Yusong Li, Leslie M. Shor, Dmitry A. Markov. "Examination of NOM Physicochemical Properties on Nanomaterial Transport." American Chemical Society (ACS) March 2010, San Francisco CA.
- Greene\*\*, J.L. and L.M. Shor. "Sorption and Diffusion of Antibacterial Compounds into PDMS." American Institute of Chemical Engineers (AIChE). November 2009, Nashville TN (*3rd Place, Student Competition, Materials Division*).
- Dhummakupt, A.\*\*, J.L. Greene\*\*, P.C. Samson, J.P. Wikswow, L. M. Shor. "Creating Patterned Biofilms of *Staphylococcus aureus* for Use in an Oxygen-Sensing Microfluidic Device." American Institute of Chemical Engineers (AIChE). November 2009, Nashville TN.
- Dhummakupt, A.\*\*, J.L. Greene\*\*, P.C. Samson, J.P. Wikswow, L. M. Shor. "Creating Patterned Biofilms of *Staphylococcus aureus* for Use in an Oxygen-Sensing Microfluidic Device." Biomedical Engineering Society (BMES) Annual Meeting. October 2009, Pittsburgh, PA.
- Tuorto, S.J., G.L. Taghon, and L.M. Shor. "Demonstrating Spatial and Conditional Resource Differentiation by Marine Bacterivorous Protozoa Using Simulated Microhabitats." 109<sup>th</sup> General Meeting of the American Society for Microbiology. May 2009, Philadelphia PA.
- Greene, J.L.\*\*. and L.M. Shor. "Diffusion and Partitioning of Organic Compounds into Polydimethyl Siloxane (PDMS)." Tennessee Academy of Sciences. March 2009, Nashville TN (*1st Place, Student Competition, Chemistry Division*).
- Dhummakupt, A.\*\* and L.M. Shor. "Information Cascades in a Protozoan Population Caused by Sequential Choices of Individuals." Tennessee Academy of Sciences. March 2009, Nashville TN (*2<sup>nd</sup> Place, Student Competition, Biology Division*).
- Allwardt, V. \*\*, P. Samson, D. Markov, J.W. Dolan, J.P. Wikswow, and L.M. Shor. "Microfluidic Approach to Measure Bacterial Responses to Micro-chemical Gradients." American Society for Microbiology (ASM) KY-TN Meeting, October 2008, Henderson TN (*Winner: best student paper*).
- Shor, L.M., W. Wang, G.L. Taghon, J.P. Wikswow, E.J. LeBoeuf, and D.S. Kosson, "Protozoan Predation Behavior in Microfluidic Habitat Networks." 108<sup>th</sup> General Meeting of the American Society of Microbiology, June 2008, Boston, MA.
- \*\*denotes undergraduate student author.**

## HONORS & AWARDS

---

- o Vanderbilt SWE Faculty Appreciation Award, 2007
- o Fellow, National Institutes of Health Biotechnology Training Program, 1996-1999
- o High Distinction, Distinguished Majors Program, Dept. of Environmental Sciences, University of Virginia, 1996
- o Hydrology Award, Department of Environmental Sciences, University of Virginia, 1996

## TEACHING

---

### University of Connecticut

- |            |   |
|------------|---|
| 2011, 2009 | Principles and Applications of Microfluidic Devices (Chemical Engineering technical elective, advanced undergrad/graduate level). |
| 2010       | Introduction to Chemical Engineering (Sophomore core course)  |

### Vanderbilt University, Nashville TN

2001-2002, 2007	Fluid Mechanics (Core Engineering Course, Junior Level, Departments of Civil & Environmental Engineering and Mechanical Engineering).
2007	Fluid Mechanics Laboratory, Fall 2007
2006-2008	Vanderbilt Visions (Full-year Freshman Orientation Course)

## ADVISING

---

### Post-doctoral Research Associates

2010-pres	<u>Jessica Chau</u> , University of Connecticut, Chemical Engineering (50%).
2007-2009	<u>Dmitry Markov</u> , Vanderbilt University, Biomedical Engineering (25%).
2008	<u>Steven Tuorto</u> , Rutgers University, Institute of Marine and Coastal Sciences (50%).

### Graduate Students

2010-pres	<u>Grant M. Bouchillon*</u> , University of Connecticut, Environmental Engineering, Ph.D.
2010-pres	<u>Andrea Kadilak*</u> , University of Connecticut, Chemical Engineering, Ph.D.
2009-pres	<u>Jinzi Deng*</u> , University of Connecticut, Chemical Engineering, Ph.D.
2010-pres	<u>Joanne Elmoznino</u> , University of Connecticut, Marine Sciences, PhD.
2009-2010	<u>Robert Yau*</u> , University of Connecticut, Chemical Engineering, MS. " <i>Characterization of Naturally-derived Hydrogels for Microfluidics and Environmental Management</i> "
2002-2006	<u>Wei Wang</u> , Vanderbilt University, Environmental Engineering, Ph.D. " <i>The Effects of Micro-scale Heterogeneity on Protozoan Movement in Porous Media.</i> "

\*denotes primary advisor

### Undergraduate Students (17 total, past 5 years, 70% under-represented)

University of Connecticut, Storrs CT

2011-pres	<u>Emily Anderson</u> , Chemical Engineering, " <i>Hydrogel effects on soil moisture retention</i> "
2011-pres	<u>Leia Dwyer</u> , Chemical Engineering, TBA.
2010-2011	<u>Kristina Gillick</u> , Chemical Engineering, " <i>Protozoa Signaling in Microfluidic Networks</i> "
2009-pres	<u>Leonela Villegas</u> , Chemical Engineering, " <i>Determining the Effect of Spacing in Protection of Staphylococcus aureus by Pseudomonas</i> "
2010-2011	<u>Megan Nolan</u> , Chemical Engineering, " <i>Trapping of Microbial Eukaryotes</i> "
2010	<u>Kate Nicholson</u> , Chemical Engineering, " <i>Development of a biofilm screening device for drug discovery</i> "

Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey Mexico

2010	<u>Alfredo Vázquez Rodríguez</u> , Chemical Engineering, " <i>Modeling diffusion through hydrogels</i> "
------	--

Vanderbilt University, Nashville TN

2007-2010	<u>Jennifer L. Greene</u> , Chemical Engineering, " <i>Sorption and Diffusion of Organic compounds in PDMS</i> "
2006-2010	<u>Grant M. Bouchillon</u> , Environmental Engineering, " <i>Leaching of PAHs from cement-stabilized soil cores</i> "
2007-2010	<u>Adit Dhummakupt</u> , Chemistry, " <i>Information Cascading in Protozoa Populations</i> "
2007-2009	<u>Kathleen Grunder</u> , Biomedical Engineering, " <i>Development and Calibration of an Optical Oxygen Sensor for Microfluidic Devices</i> "
2008	<u>Nicholas Luibrand</u> , Biomedical Engineering, " <i>Development of Micro-structured Arrays for Microbial Diversity Studies</i> "
2008-2009	<u>Victoria Lopez</u> , Biomedical Engineering, " <i>Microscopic size and Microfluidic Devices</i> "
2007	<u>Samuel Nackman</u> , Mechanical Engineering, " <i>Growth Kinetics of Protozoa in Microfluidic Devices</i> "

2008 Samantha Sabatinio, Environmental Engineering, “*Simulating Natural Pore Structures with Microfluidic Devices*”

Nashville State Technical Community College (NSF REU Co-op.), Nashville TN

2007-2009 Vanessa Allwardt, Biotechnology, “*Development of the Quad Biofilm Array for Biomedical Research*”

2007 John M. Mallard, Biotechnology, “*Microbial Habitat Arrays for Microbiological Research and Education*”

## SERVICE

---

### Professional Service (last 3 years)

2010-present External Advisory Committee, Vanderbilt Institute for Integrated Biosystems Research and Education (VIIBRE), Vanderbilt University, Nashville TN.  
2009-present Co-Chair of Water Section, Environmental Division, American Institute of Chemical Engineers (AIChE), session chair Environmental Impacts of Nanomaterials.  
2005-present Technical advisor to New York Academy of Sciences Pollution Prevention Committee evaluating PAH pollution sources to the New York Harbor watershed.  
2007-2009 Scientific Steering Committee, Vanderbilt Institute for Integrated Biosystems Research and Education (VIIBRE).  
2008 Organizing Committee and Systems Biology Session Chair, NSF Instrument Development for Biological (IDBR) Research Workshop, September 19-21.  
2007 Academic Programs Organizing Committee, Society of Women Engineers (SWE) National Conference, Nashville TN, October 24-26.

### Peer Reviewing

NSF Proposal Review panels

Ad hoc Manuscript Reviewing:

*BMC Systems Biology; Chemosphere; Environmental Health Perspectives; Environmental Science & Technology; Environmental Toxicology and Chemistry; Journal of Environmental Quality; Journal of Limnology & Oceanography.*

### University Service, University of Connecticut, Storrs CT

2010-present Member: Chemical Engineering Undergraduate Curriculum Committee  
2010-present Presenter: Engineering Squared summer camp, Chemical Engineering representative  
2010-present Faculty Advisor: Alpha Chi Omega Chemical Engineering Honor Society  
2009-present Participant, Speaker: Women in Math, Science, and Engineering (WIMSE)  
2009-present Presenter: Multiply Your Options (MyO). (One-day workshop hosted at UConn that for local middle school girls).  
2009-present Presenter: UConn Engineering Open House, department and SoE.  
2009-2010 Member: University Environment Committee (planning for proposed BA in Environmental Studies)

### University Service, Vanderbilt University, Nashville TN

2003-2009 Faculty Advisor, Society of Women Engineers (SWE) student chapter.  
2007-2009 Faculty Mentor, Systems Biology and Bioengineering Undergraduate Research Experience (SyBBURE).  
2006-2008 Faculty Advisor, Mayfield Lodge, “*The Gender Gap in STEM: Research and Outreach.*”  
2006-2008 Faculty VUceptor, Vanderbilt Visions Freshman Orientation Program (4 semesters).  
2005-2006 Vanderbilt University Committee on Articulation of Norms and Values.

**Professional Organizations**

American Chemical Society (ACS)

American Institute of Chemical Engineers (AIChE)

American Society for Microbiology (ASM)

Association of Environmental Engineering and Science Professors (AEESP)