

Curriculum Vitae **LUTGARDE RASKIN**

Vernon L. Snoeyink Distinguished University Professor of Environmental Engineering
Altarum/ERIM Russell O'Neal Professor of Engineering
Professor of Civil and Environmental Engineering
University of Michigan

Bio

Lutgarde Raskin is the Vernon L. Snoeyink Distinguished University Professor of Environmental Engineering and the Altarum/ERIM Russell O'Neal Professor of Engineering at the University of Michigan (UM), where she has been a professor of Environmental Engineering since 2005. Before this, she was a professor at the University of Illinois at Urbana-Champaign (UIUC) for 12 years. She received a BS/MS degree in Bioscience Engineering and a BS/MS degree in Economics from the KU Leuven, Belgium. Her PhD degree is in Environmental Engineering from UIUC. Raskin is globally recognized as an expert in microbial aspects of anaerobic waste treatment and drinking water treatment technologies.

Raskin has served/serves as the research advisor of 20 postdocs, 31 PhD students, ~80 Master's students, and ~70 undergraduate students. She was recently awarded the UM Distinguished Graduate Mentor Award for her outstanding role as a mentor. Twenty-five of her former trainees are in academic positions across the world. She has received external recognition as the 2018-2019 Association of Environmental Engineering and Science Professors (AEESP) Distinguished Lecturer, and is an Elected Fellow of the American Academy of Microbiology, the International Water Association (IWA), the Water Environment Federation, and the AEESP. She further received several external awards, including the American Society of Civil Engineers (ASCE) Simon W. Freese Environmental Engineering Award, the IWA Microbial Ecology and Water Engineering Specialist Group Arden-Lockett Award, the International Society for Microbial Ecology - IWA BioCluster Award, the Water Research Foundation Paul L. Busch Award for Innovation in Applied Water Quality Research, and the AEESP Frontier Award in Research. Raskin has authored or co-authored ~175 journal papers, has given ~150 invited lectures, and is an author or co-author on ~450 conference papers or abstracts. Her work is well cited (~17,900 citations).

Raskin has a strong internal and external service record. At the UM, she served as the Environmental and Water Resources Engineering Program Director for four years, was the Civil and Environmental Engineering Graduate Chair for four years, served multiple terms on the Civil and Environmental Engineering Executive Committee, and was an Associate Dean for Academic Programs and Initiatives at the Rackham Graduate School, where she was responsible for building and maintaining relationships with Rackham programs in engineering and the physical sciences. External service contributions include co-chairing the 2013 IWA Microbial and Water Engineering (MEWE) and the 2022 IWA World Congress on Anaerobic Digestion (AD-17) in Ann Arbor. She currently serves on the Leadership Committee of the IWA Anaerobic Digestion Specialist Group and has served on the Program Committees for numerous IWA's Specialist Group Conferences, including several Anaerobic Digestion, Biofilm, and Leading Edge Technology Conferences. She is an Associate Editor for *Environmental Science & Technology* and serves on the Editorial Board/Advisory Board of five other journals. She has served on various committees of other professional societies, including the AEESP, for which she served on the Board of Directors from 2016-2019. She was elected to the U.S. National Academy of Engineering in 2021.

Research Statement

I am inspired by the complexity of the microbial world and the astonishing progress we have made in the field of microbial ecology over the past few decades. This progress continuously motivates me to rethink engineered systems so we can better harness the power of microorganisms to treat water and recover resources from waste stream. Most of the research projects my team and I work on strive to understand and improve various aspects of the engineered water cycle microbiome to improve human and environmental health using sustainable design approaches. We especially focus on water, energy, and chemical recovery from waste streams, and drinking water systems including biofiltration, disinfection, distribution and building plumbing.

Contact

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Web: envbiotech.engin.umich.edu

Education

1988-1993	Ph.D. in Environmental Engineering in Civil Engineering, University of Illinois at Urbana-Champaign (UIUC).
1984-1986	Licentiate Economics (B.S.+M.S.), Distinction, University of Leuven
1987-1988	(KU Leuven), Belgium.
1982-1987	Bioscience Engineering (Environmental Biotechnology) (B.S.+M.S.), Great Distinction, KU Leuven, Belgium.

Positions Held

2020-present	Vernon L. Snoeyink Distinguished University Professor of Environmental Engineering, University of Michigan.
2013-present	Altarum/ERIM Russell O'Neal Professor of Engineering, University of Michigan.
2005-present	Professor, Dept. of Civil and Environmental Engineering, University of Michigan.
2020-2022	Associate Dean for Academic Programs and Initiatives, Rackham Graduate School, University of Michigan.
2014-2017	Graduate Chair, Dept. of Civil and Environmental Engineering, University of Michigan.
2003-2005	Professor, Dept. of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign (UIUC).
2004-2005	Professor, Institute for Genomic Biology (IGB), UIUC.
2000-2005	Professor-Associate Professor, Beckman Institute, Institute Affiliate, UIUC.
2002-2003	Visiting Research Professor, Laboratory for Microbial Ecology and Technology, University of Gent, Belgium.
1999-2003	Associate Professor, Dept. of Civil and Environmental Engineering, UIUC.
1993-1999	Assistant Professor, Dept. of Civil and Environmental Engineering, UIUC.
1996-1997	Fellow Center for Advanced Study, UIUC.
1988-1993	Graduate Research Assistant, Dept. of Civil Engineering and Dept. of Veterinary Pathobiology, UIUC.

Program Affiliations at University of Michigan

Dow Distinguished Faculty Fellow in Sustainability
Faculty Affiliate Graham Sustainability Institute
Faculty Affiliate Energy Institute
Faculty Affiliate Center for Molecular and Clinical Epidemiology of Infectious Diseases (MAC-EPID)
Faculty Affiliate Center for Microbial Systems
Integrated Training in Microbial Systems (ITiMS) Faculty Advisor

Awards and Honors

2024	AEESP Fellow
2023	ASCE Simon W. Freese Environmental Engineering Award for “her extraordinary accomplishments in using fundamental scientific principles and current research findings to solve the most challenging environmental problems.”
2022	University of Michigan College of Engineering Stephen S Atwood Award
2021	Elected to the U.S. National Academy of Engineering
2021	AEESP Master Lecturer, Resource Recovery From Organic Waste Streams by Anaerobic Biotechnologies, WEFTEC, Oct. 18, 2021, Chicago, IL, premier speaker in the Research and Innovation Symposium (RIS) track at WEFTEC and serves as an opening keynote for anyone interested in research and how it is applied in the water/wastewater sector. This speaker is selected by WEF and AEESP for great ideas, innovations, and lifetime achievements and service to the industry.
2021	University of Michigan College of Engineering Ted Kennedy Family Team Excellence Award for University of Michigan’s N95 recycling program for COVID-19
2020	Vernon L. Snoeyink Distinguished University Professor of Environmental Engineering, UM
2019	International Water Association (IWA) Microbial Ecology and Water Engineering (MEWE) Specialist Group Ardern-Lockett Award. This award recognises outstanding contributions to research and practice in the field of microbial ecology and water engineering. The award is named after Edward Ardern and William Lockett, the inventors of the activated sludge wastewater treatment process, in recognition of MEWE’s strong link to the microbial population dynamics of activated sludge systems.
2019	AEESP Distinguished Service Award for Outstanding Service as Chief Technology Officer and AEESP Board Member.
2019	Civil and Environmental Engineering Distinguished Alumna Award, UIUC.
2019	AEESP Distinguished Lecturer Award.
2018-2019	Association of Environmental Engineering and Science Professors (AEESP) Distinguished Lecturer. The AEESP Foundation each year sponsors a national lecture tour by an environmental engineering and science professor. The lecturer is selected in recognition of his or her excellence as both a researcher and educator and ability to give engaging oral presentations to members of the environmental engineering community and the general public.
2018	Distinguished Lecturer, College of Environmental Sciences & Engineering, Peking University.
2018	Elected Fellow International Water Association.
2017	Rackham Distinguished Graduate Mentor Award, UM.
2017	Jack A. Borchardt Award, This award is in recognition and appreciation of individual contributions toward the continuing education of drinking water and clean water operators, engineers, and public officials, Michigan Section of the American Water Works Association.
2016	ISME (International Society for Microbial Ecology)-IWA (International Water Association) BioCluster Award 2016 (Grand Prize). This prize rewards interdisciplinary research of unusual merit at the interface of microbial ecology and water/wastewater treatment.
2016	Associate Editor <i>Environmental Science & Technology</i> .
2014	Dow Distinguished Faculty Fellow in Sustainability, UM.
2013	Altarum/ERIM Russell O’Neal Professor of Engineering, UM
2013	Monroe-Brown Foundation Research Excellence Award, College of Engineering, UM.
2012	Elected Fellow Water Environment Federation.
2009	Elected Fellow American Academy of Microbiology.
2007	AEESP Frontier Award in Research for advancing the environmental engineering and science field through recognized research leadership and pioneering efforts in a new and innovative research area.
2006	American Society of Civil Engineers Walter L. Huber Civil Engineering Research Prize for pioneering the application of molecular biology techniques in wastewater treatment to study complex microbial communities, the development of advanced microbial monitoring techniques, and microbial control strategies for wastewater treatment problems.
2005	Incomplete List of Teachers Ranked as Excellent by Their Students, UIUC.
2004	Incomplete List of Teachers Ranked as Excellent by Their Students, UIUC.

2003	Illinois Consortium for Food and Agricultural Research (C-FAR) Donald A. Holt Achievement Award, received as a member of the Livestock and Urban Waste Recycling Research Team.
2002-2003	Flemish Science Foundation Fellowship (Fonds voor Wetenschappelijk Onderzoek, FWO, Vlaanderen).
2002	Paul L. Busch Award, Water Environment Research Foundation Endowment for Innovation in Applied Water Quality Research in recognition for contributions to research in water quality and the practical application of research in the water environment.
2002	AEESP Distinguished Service Award for Outstanding Service as Chair of the Ph.D. Dissertation Award Sub-committee.
2002	Xerox Award for Faculty Research, College of Engineering, UIUC.
1998-2005	Narbey Khachaturian Faculty Scholar, Dept. of Civil and Environmental Engineering, UIUC.
1997	National Science Foundation Faculty Early Career Development Program (CAREER) Award.
1997	Xerox Award for Faculty Research, College of Engineering, UIUC.
1997	Incomplete List of Teachers Ranked as Excellent by Their Students, UIUC.
1996-1997	Fellow, Center for Advanced Study, UIUC.
1994	National Science Foundation Research Initiation Award.
1987	Graduated with Great Distinction, KU Leuven.
1987	Laureate W.E.L. (Water, Energie, Leefmilieu) for M.S. thesis.

Awards and Honors of Graduate and Undergraduate Students and Postdocs

2024	Ford Foundation 2024-25 Predoctoral Fellowship (National Academies of Science, Engineering, and Medicine), Dianna Kitt.
2024	Richard and Eleanor Towner Prize for Outstanding GSIs, College of Engineering, UM, Hang Alex Song
2023	Admission to the Microbial Diversity Course at Marine Biological Laboratory (Woods Hole), Hang Alex Song
2022	Honorable Mention, Outstanding Doctoral Dissertation Award, AEESP, Nicole Rockey.
2022	Integrated Training in Microbial Systems (ITiMS) Fellowship, UM, Hang (Alex) Hong.
2022	Michigan Difference Student Leadership Award, UM, Katherine Dowdell
2022	Admission to the Microbial Diversity Course at Marine Biological Laboratory (Woods Hole), Renisha Karki
2021	Michigan Section AWWA Fellowship for Water Quality and Treatment Study, Nuha Alfahham
2021	Honorable Mention, Richard and Eleanor Towner Prize for Outstanding Ph.D. Research, UM, Shilva Shrestha
2021	Honorable Mention, Richard and Eleanor Towner Prize for Outstanding Ph.D. Research, UM, Nicole Rockey
2021	Rackham Predoctoral Fellowship, UM, Matthew Vedrin
2021	Rackham Predoctoral Fellowship, UM, Katherine Dowdell
2021	Ford Foundation 2021-24 Predoctoral Fellowship (National Academies of Science, Engineering, and Medicine), Dianna Kitt.
2020	Gonter Award, Division of Environmental Chemistry, American Chemical Society, Emily Crossette.
2020	Integrated Training in Microbial Systems (ITiMS) Fellowship, UM, Dianna Kitt.
2020	Rackham Spring/Summer Internship Grant for Bioscience Doctoral Students, UM, Matthew Vedrin
2019	Canham Graduate Studies Scholarship, Water Environment Federation, Shilva Shrestha
2019	Rackham Predoctoral Fellowship, UM, Shilva Shrestha
2019	Rackham Predoctoral Fellowship, UM, Nicole Rockey
2019	CIT IAR master thesis prize, KU Leuven, Maxim Muermans
2019	Energy Institute-UROP summer research fellowship, UM, Lucy Aley
2019	Integrated Training in Microbial Systems (ITiMS) Fellowship, UM, Shilva Shrestha.
2019	Institute of International Education Graduate International Research Experience (IIE-GIRE) Program scholarship, Katherine Dowdell
2019	Outstanding Student Oral Presentation Award, Symposium on Biotechnology for Fuels and Chemicals, Shilva Shrestha
2018	NWRI-Biolargo Graduate Fellowship, Katherine Dowdell

2018 Admission to to participate in the 2018 Hopkins Microbiology Course, Stanford University Katherine Dowdell.

2018 U.S. National Science Foundation Graduate Research Fellowship, Katherine Dowdell

2018 Rackham Predoctoral Fellowship, Caroline Van Steendam

2018 First Place Academic Achievement Award for the Best Doctoral Dissertation from the American Water Works Association, Nadine Kotlarz.

2018 Michigan Section AWWA Fellowship for Water Quality and Treatment Study, Katherine Dowdell

2018 The Integrated Training in Microbial Systems (ITiMS) program mini grant (\$10,000), Emily Crossette

2017 Best Presentation Award for Post-Doc Yun Shen (with co-authors A. J. Prussin II., S.-J. Haig, L. Marr, L. Raskin), Quantification of opportunistic pathogens in shower water and aerosols formed during showering, AEESP Conference, Ann Arbor, Michigan. June 20-22.

2017 Admission to the Strategies and Techniques for Analyzing Microbial Population Structures (STAMPS) Course at Marine Biological Laboratory (Woods Hole), Emily Crossette

2017 Rackham Graduate Student Research Grant, UM, Matthew Vedrin

2017 Rackham International Research Award, UM, Raghav Reddy.

2017 International Institute Individual Fellowship, UM, Matthew Vedrin.

2017 Graham Environmental Sustainability Institute Dow PhD Fellowship, UM, Matthew Vedrin.

2017 Integrated Training in Microbial Systems (ITiMS) Fellowship, UM, Emily Crossette.

2017 Dow Sustainability Master's Fellowship, UM, Grace Rodriguez

2017 Dow Sustainability Master's Fellowship, UM, Grace van Velden

2017 Outstanding Poster Award, IWA 15th World Congress on Anaerobic Digestion, Shilva Shrestha

2016 International Institute Individual Fellowship, UM, Grace Rodriguez

2016 Walter Weber Student Award, UM, Nadine Kotlarz

2016 Alfred P. Sloan Foundation, Microbiology of the Built Environment Postdoctoral Fellowship, Yun Shen.

2016 U.S. National Science Foundation Graduate Research Fellowship, Emily Crossette

2016 Integrated Training in Microbial Systems (ITiMS) Fellowship, UM, Caroline Van Steendam.

2015 Scholarship to attend the course "Microbial Ecology of Anaerobic Digestion: Application to the hot topic of low-temperature AD" 14th World Congress on Anaerobic Digestion |Viña del Mar, Chile, Xavier Fonoll

2015 Rackham Summer Award, UM, Xunchang Fei

2015 CTAHR MS Student Oral Presentation Award of Merit, University of Hawaii at Manoa, Shilva Shrestha

2015 U.S. National Science Foundation Graduate Research Fellowship, Nicole Rockey

2015 Admission to the Microbial Diversity Course at Marine Biological Laboratory (Woods Hole), Caroline Van Steendam

2015 American Society for Microbiology Travel Grant, Nadine Kotlarz.

2015 Dow Sustainability Postdoctoral Fellow, Sarah Haig.

2015 Integrated Training in Microbial Systems (ITiMS) Fellowship, UM, Nadine Kotlarz.

2015 Dow Sustainability Master's Fellowship, UM, Sean Murphy

2014 U.S. EPA STAR Fellowship, Nadine Kotlarz.

2014 Alfred P. Sloan Foundation, Microbiology of the Built Environment Postdoctoral Fellowship, Sarah Haig.

2014 International Institute Individual Fellowship, UM, Raghav Reddy

2014 Dow Sustainability Master's Fellowship, UM, Elizabeth Grobbel

2013-15 Environmental Research and Education Foundation (EREF) Scholarships (3), Xunchang Fei

2013 John P. Hennessey Scholarship Michigan Water Environment Association, Anton Dapcic.

2013 Graham Environmental Sustainability Institute Dow Fellowship, Nadine Kotlarz.

2013 Admission to the Microbial Diversity Course at Marine Biological Laboratory (Woods Hole), Nadine Kotlarz

2012 21st Annual Michigan Section American Water Works Association/Michigan Water Environment Association Joint Exposition, Lansing, MI, Feb. 2012, Fresh Idea Poster Competition Award, Nadine Kotlarz and Giridhar Upadhyaya.

- 2012-13 U.S. Student Fulbright award to work with Professor Moses Musaaazi on a biosand water filter research project in Uganda, including laboratory research and work with a local community, Andrea Trese.
- 2012 National Security Education Program (NSEP) David L. Boren Fellowship, to support a four month stay in Tanzania to study Swahili and take part in an internship with the Zanzibar Water Authority focused on improving water supply for local citizens, Andrea Trese.
- 2012 Center for the Education of Women Menakka and Essel Bailey Graduate Fellowship, Tara Clancy.
- 2012 U.S. Department of State Critical Language Scholarship for participation in the Bangla/Bengali intensive summer language institute (Bengali-Intermediate), Tara Clancy.
- 2011 1st place in Geosyntec Consultants Paper Competition, Adam Smith
- 2011 Raoul Wallenberg International Summer Travel Fellowship, Tara Clancy
- 2011 U.S. National Science Foundation Graduate Research Fellowship, Ashley Hammerbeck
- 2011 U.S. National Science Foundation Graduate Research Fellowship, Tara Clancy
- 2011 U.S. EPA STAR Fellowship, Tara Clancy (declined due to NSF fellowship award)
- 2011 U.S. Department of State Critical Language Scholarship for participation in the Bangla/Bengali intensive summer language institute (Bengali-Beginner), Tara Clancy.
- 2011 Twentieth Annual Michigan Section American Water Works Association/Michigan Water Environment Association Joint Exposition, Lansing, MI, Feb. 2-3. Fresh Idea Poster Competition Award, Tzu-Hsin Chiao and Ameet Pinto.
- 2011 Michigan Section AWWA Fellowship for Water Quality and Treatment Study, Tara Clancy.
- 2011 Graham Environmental Sustainability Institute Fellowship, Tara Clancy.
- 2010 ISME travel awards for young scientists, Dongjuan Dai
- 2010 University of Michigan Rackham one-term dissertation fellowship, Donguan Dai
- 2010 Association of Environmental Engineering and Science Professors, Ph.D. Dissertation Award, David Berry.
- 2010 American Water Works Association's Annual Conference and Exhibition Young Professionals Poster Competition (second place), Chicago, IL, June 20-24, 2010, Tara Clancy, Giridhar Upadhyaya, Pranab Ghosh, and Jeff Jackson
- 2010 Antenore "Butch" Davanzo Scholarship Michigan Water Environment Association, Mark Poll.
- 2010 John P. Hennessey Scholarship Michigan Water Environment Association, Adam Smith.
- 2010 Nineteenth Annual Michigan Section American Water Works Association/Michigan Water Environment Association Joint Exposition, Lansing, MI, Feb. 2-3. Fresh Idea Poster Competition Award, Tara Clancy, Giridhar Upadhyaya, and Jeff Jackson.
- 2009 AEESP Grand Challenge Student Paper Award, David Berry (with co-authors M. Horn, M. Wagner, C. Xi, and L. Raskin (2010), Infectivity and intracellular survival of *Mycobacterium avium* in environmental *Acanthamoeba* strains and dynamics of inactivation with monochloramine, *Applied and Environmental Microbiology*, **76** (19): 6685-6688.).
- 2009 Admission to the Microbial Diversity Course at Marine Biological Laboratory (Woods Hole), Monisha Brown
- 2009 Michigan Section AWWA Fellowship for Water Quality and Treatment Study, Giridhar Upadhyaya.
- 2008 Graham Environmental Sustainability Institute Fellowship, Giridhar Upadhyaya.
- 2008 U.S. EPA STAR Fellowship, David Berry.
- 2008 Antenore "Butch" Davanzo Scholarship Michigan Water Environment Association, Giridhar Upadhyaya.
- 2008 Admission to the Microbial Diversity Course at Marine Biological Laboratory (Woods Hole), Dongjuan Dai
- 2008 University of Michigan Rackham graduate student research grant, Dongjuan Dai
- 2007 11th World Congress on Anaerobic Digestion, Brisbane, Australia, Sept. 23-27, 2007. Best Presentation Award (Sudini Padmasiri, with co-authors P. Tontcheva, M. Fitch, M.N. Pons, B. Norddahl, E. Morgenroth, and L. Raskin).
- 2007 GEM Ph.D. Engineering Fellowship, Advisor for Tara Jackson
- 2007 Graham Environmental Sustainability Institute Fellowship, David Berry

- 2007 Sixteenth Annual Michigan Section American Water Works Association/Michigan Water Environment Association Joint Exposition, Lansing, MI, Feb. 6-7. Fresh Idea Poster Competition Award, Xu Li and Giridhar Upadhyaya.
- 2007 Michigan Section AWWA Fellowship for Water Quality and Treatment Study, Xu Li.
- 2007 Admission to the Microbial Diversity Course at Marine Biological Laboratory (Woods Hole), David Berry
- 2006 University of Michigan Rackham international student fellowship, Dongjuan Dai
- 2006 Great Lakes International Imaging and Flow Cytometry Association Annual Conference, Best Poster Award, Diane Holder (co-author with D. Berry, D. Dai, L. Raskin, and C. Xi).
- 2006 Association of Environmental Engineering and Science Professors, Ph.D. Dissertation Award, Dominic Frigon.
- 2006 Universities Council on Water Resources (UCOWR), Ph.D. Dissertation Award, Dominic Frigon.
- 2006 Michigan Section AWWA Fellowship for Water Quality and Treatment Study, David Berry.
- 2005 First International Workshop on the Anaerobic Digestion Model No. 1, Sept. 4-6, Lyngby, Denmark. First Prize for Poster Presentation, Toshio Shimada.
- 2005 American Water Works Association Illinois Section. First Prize for Poster Presentation in Young Professional Section, Xu Li and Young Chul Choi.
- 1999 Montgomery Watson and Association of Environmental Engineering and Science Professors M.S. Thesis Award, First Place, Daniel Oerther.
- 1999 Water Environment Federation, First Place in Student Paper Competition, Ph.D. Category, Francis de los Reyes.
- 1998 Illinois Water Environment Association, Best Student Paper Award, Francis de los Reyes.
- 1997 Montgomery Watson and Association of Environmental Engineering Professors, M.S. Thesis Award, Second Place, Matthew Griffin.

Membership in Professional Organizations

American Chemical Society
 American Society for Microbiology
 American Water Works Association
 Association of Environmental Engineering and Science Professors
 International Water Association
 Water Environment Federation

Invited Seminars and Lectures

1. Puzzled by nontuberculous mycobacteria and monochloramine, Special Pathogens Laboratory Webinar, September 13, 2023.
2. Dowdell, K. S.; Raskin, L.; Edwards, M. Methods for Detecting and Differentiating Opportunistic Premise Plumbing Pathogens (OPPPs) to Determine Efficacy of Control and Treatment Technologies. Water Research Foundation Webcast, April 4, 2023.
3. Potgieter, S., Lahr, R., Vosloo, S., Dowdell, K., Vedrin, Page, S., Bautista-de los Santos, Q., Keown, J., Quneibi, T., Alfahham, N., Lee, S., Sandoval, S., Guo, Y., Pinto, A., Steglitz, B & Raskin, L. Assessing the impact of drinking water treatment on distribution system nitrifier populations, South Dakota State University Crother's Seminar, South Dakota, USA, March 2023.
4. Researcher-Utility Partnerships for Improving Microbial Drinking Water Quality and Reduce the Risk of Opportunistic Infections, International Forum on Advanced Environmental Sciences and Technology (iFAST) Dec. 14, 2022
5. Managing microbiomes in urban water systems, Distinguished University Professorship Lectures: Insights Into Distinguished Careers, University of Michigan, November 15, 2022
6. Potgieter, S., Bautista, M., Page, S., Keown, J., Lahr, R., Olson, T. & Raskin, L. Understanding nitrification through biofilter start-up and acclimation. City of Ann Arbor drinking water treatment plant, Lunch and Learn. Michigan, USA, March 2022.
7. Researcher-Utility Partnerships for Advancing Microbial Drinking Water Quality, Third Coast Water Seminar Series, Chicago, IL, May 26, 2021.
8. Researcher-Utility Partnerships for Advancing Microbial Drinking Water Quality, WESTalks distinguished seminar series, University of British Columbia and McGill University, Jan. 14, 2021.

9. Researcher-Utility Partnerships for Advancing Microbial Drinking Water Quality, 2020-2021 Colloquium Series, Dept. of Chemical and Environmental Engineering, Univ. of California, Riverside, CA, Dec. 4, 2020.
10. Researcher-Utility Partnerships for Advancing Microbial Drinking Water Quality, Centennial Seminar Series, Environmental research: The next 100 years, Rutgers University, Nov. 6, 2020.
11. Resource Recovery From Urban Waste Streams by Engineering Anaerobic Microbiomes, NASA CUBES webinar, July 23, 2019.
12. 2018-2019 AEESP Distinguished Lecturer. Presented one of two Lectures “Can engineering controls shape the drinking water microbiome and reduce the risk of opportunistic infections?” and “Converting urban organic waste streams into sustainable resources with novel anaerobic bioprocesses” at the University of Pittsburgh (Sept. 14, 2018); Princeton University (Oct. 8, 2018); John Hopkins University (Oct. 9, 2018); The Ohio State University (Oct. 15, 2018); Yale University (Oct. 22, 2018); University of Massachusetts, Amherst (Oct. 24, 2018); Clemson University (Oct. 26, 2018); University of South Florida (Nov. 2, 2018); University of North Carolina at Chapel-Hill (Nov. 5, 2018); Syracuse University (Nov. 9, 2018); University of Toronto (Nov. 12, 2018); Rice University (Nov. 28, 2018); University of Michigan (Feb. 1, 2019); Arizona State University (Feb. 25, 2019); University of Southern California (Feb. 27, 2019); Carollo Engineers, Orange County (Feb. 28, 2019); University of Illinois at Urbana-Champaign (April 19, 2019); Marquette University (April 24, 2019); Stanford University (May 6, 2019).
13. Raskin, L., Van Steendam, C., Fairley-Wax, T., Jalgaonkar, N., Skerlos, S., (2018) Energy Recovery from domestic wastewater using anaerobic membrane bioreactor treatment [Webinar presentation]. WEF/WRF
14. The need for Biofilm-Enhanced Anaerobic Membrane Bioreactors for Domestic Wastewater Treatment, Forum of the Environment, Nanjing University, Nanjing, China. May 30, 2018.
15. Distinguished Lecturer, College of Environmental Sciences and Engineering, Peking University, Beijing, China, May 23-26, 2018. Four lectures: (i) Distinguished Scholar Seminar on Environmental Sciences and Engineering: Can engineering controls shape the drinking water microbiome and reduce the risk of opportunistic infections? (ii) Molecular microbial Ecology in Environmental Biotechnology (iii) Advances of anaerobic biological treatment, lecture for undergraduate students, (iv) Publishing in ES&T.
16. Managing the drinking water microbiome, April 9, 2018, Michigan Tech, Houghton, MI, Visiting Women & Minority Lecture Series
17. Managing the Drinking Water Microbiome, January 31, 2018, Aalborg University, Aalborg, Denmark
18. The Drinking Water Microbiome, October 17, 2017, Tsinghua University, Beijing, China
19. The need for Biofilm-Enhanced Anaerobic Membrane Bioreactors, January 18, 2017, Peking University, Beijing, China
20. The Drinking Water Microbiome, ACS Publications Microbiome Webinar Series, Part I, The Microbiome and the Environment, July 26, 2016
21. Leveraging the Benefits of Microbes in Drinking Water Systems, Departmental Seminar, Department of Civil and Environmental Engineering, University of Pittsburgh, October 14, 2015.
22. Leveraging the Benefits of Microbes in Drinking Water Systems, 2015 Clifford W. Randall Distinguished Lecture, The Charles E. Via, Jr. Department of Civil and Environmental Engineering, Virginia Tech, September 18, 2015.
23. Dow Distinguished Faculty and Postdoctoral Researchers Dinner Lecture, Improving the sustainability of the urban water cycle through environmental biotechnology research, University of Michigan, March 24, 2015.
24. Energy Recovery from Domestic Wastewater Using Anaerobic Membrane Bioreactor Treatment, College of Agriculture, Forestry and Natural Resource Management, University of Hawaii at Hilo, Hilo, HI, April 7, 2015.
25. Graduate Studies at the University of Michigan, University of Hawaii at Manoa, Manoa, HI, April 6, 2015.
26. Energy Recovery from Domestic Wastewater using Anaerobic Membrane Bioreactor Treatment, Department of Civil and Environmental Engineering, Northwestern University, November 7, 2014
27. Energy Recovery from Domestic Wastewater using Anaerobic Membrane Bioreactor Treatment, Ecology and Evolutionary Biology 466 Lecture, University of Michigan, November 6, 2014
28. Leveraging the Benefits of Microbes in Drinking Water Systems, Belgian Nuclear Research Centre, (SCK-CEN), Mol, Belgium, August 12, 2014

29. Leveraging Microbes in Drinking Water Systems to Benefit Consumers, Swiss Federal Institute for Water Research (EAWAG), Dübendorf, Switzerland, May 9, 2014
30. Energy Recovery from Domestic Wastewater using Anaerobic Membrane Bioreactor Treatment, Department of Chemical Engineering, Katholieke Universiteit Leuven, Leuven, Belgium, May 5, 2014
31. Energy Recovery from Domestic Wastewater Using Anaerobic Membrane Bioreactor Treatment, Dept. of Molecular Biosciences and Bioengineering, University of Hawaii at Manoa, Manoa, HI, April 10, 2014
32. Leveraging Microbes in Drinking Water Systems to Benefit Consumers, University of Toronto, January 6, 2014
33. Leveraging Microbes in Drinking Water Systems to Benefit Consumers, Department of Civil and Environmental Engineering, University of California, Los Angeles, Los Angeles, CA, November 7, 2013
34. Biological Drinking Water Treatment – Opportunities and Challenges, Department of Civil and Environmental Engineering, Distinguished Lecture Series, University of Houston, Houston, TX March 4, 2013
35. Biological Drinking Water Treatment – Opportunities and Challenges, Engineering Research Center for Re-inventing the Nation's Urban Water Infrastructure (ReNUWIt) Distinguished Lecture Series, Colorado School of Mines, Golden, CO, Nov. 7, 2012
36. Biological Drinking Water Treatment – Opportunities and Challenges, Warren Lecture Series, Department of Civil Engineering, University of Minnesota, Minneapolis, MN, Sept. 14, 2012
37. Bacterial Seeding in Drinking Water Treatment and Distribution Systems, Department of Microbiology and Immunology (Microbiome Group), Medical School, University of Michigan, March 7, 2012
38. Energy Recovery from Domestic Wastewater using Anaerobic Membrane Bioreactors and Molecular Biology Methods in Environmental Engineering, Doosan Hydro Technology, Inc., Tampa, FL, March 15, 2011
39. Energy Recovery from Domestic Wastewater using Anaerobic Membrane Bioreactors, Carollo Engineers, Inc., Sarasota, FL, March 16, 2011
40. Upadhyaya, G., J. Jackson, T. Clancy, J. Brown, K. F. Hayes, and L. Raskin, "Anaerobic fixed-bed bioreactor system used for simultaneous removal of nitrate and arsenic from drinking water", 9 April, 2010, University of Ghent, Belgium
41. Diversity and dynamics of microbial communities in anaerobic bioreactors and their implications for process stability, University of Notre Dame, May 8, 2008.
42. Antimicrobials and Antimicrobial Resistance in Anaerobic Bioreactors, Michigan State University, April 17, 2008.
43. Antimicrobials and Antimicrobial Resistance in Agriculture – Anaerobic Bioreactor Performance and Swine Waste, University of Vienna, Austria, Aug. 9, 2007.
44. Beating Microbial Pathogens in Drinking Water Distribution Systems Requires an Understanding of the Mechanisms of Bacterial Resistance to Disinfection, Ohio State University, May 31, 2007.
45. Survival Mechanisms of Bacterial Pathogens in Drinking Water Distribution Systems/Anaerobic Membrane Bioreactors, Malcolm Pirnie, Columbus, OH, May 30, 2007.
46. Beating Microbial Pathogens in Drinking Water Distribution Systems Requires an Understanding of the Mechanisms of Bacterial Resistance to Disinfection, Yale University, April 18, 2007.
47. Diversity and dynamics of microbial communities in anaerobic bioreactors and their implications for process stability, University of California, Riverside, Feb. 23, 2007.
48. Molecular Tools and Wastewater Treatment: Science Research Yesterday, Process Investigations Today, Routine Analysis Tomorrow? John Hopkins University, Oct. 18, 2005.
49. Understanding microbial population dynamics at fine temporal and spatial resolutions may be important for microbial community engineering, Vistas in Microbial Ecology and Environmental Biotechnology, Arizona State University, April 20, 2005.
50. Mechanism Explaining Seasonal Biological Foaming in Activated Sludge, R&D Seminar, Cecil Lue-Hing Research Center, Stickney Water Reclamation Plant, Metropolitan Water Reclamation District of Greater Chicago, Stickney, IL, Feb. 25, 2005.
51. Activated Sludge Foaming, Mycolata, and Lipases – A Journey into the Ecophysiology of a Problem to develop Operating and Design Guidelines, University of Michigan, Ann Arbor, MI, Nov. 13, 2004.
52. Microbial Ecology of Waste and Drinking Water Treatment Systems, Wageningen Agricultural University, Wageningen, The Netherlands, July 1, 2003.

53. Guest Lecturer for course "Environmental Biotechnology", Ghent University, Belgium, Fundamentals and Applications of Biofilm Systems, Nov. 27, 2002.
54. Quantification of Microbial Population Abundance and Activity in Wastewater Treatment Systems by Oligonucleotide Probe Hybridization, Cornell University, March 1, 2001.
55. Microbial Population Dynamics in a Novel Anaerobic Wastewater Treatment System, California Institute of Technology, Nov. 4, 1998.
56. Microbial Population Dynamics in Anaerobic Wastewater Treatment Systems, University of California Los Angeles, Nov. 3, 1998.
57. Microbial Population Dynamics in Wastewater Treatment Systems, Environmental Horizons 98, UIUC, April 21, 1998.
58. Microbial Phylogeny: Linkages to Processes and Biogeochemistry, The University of Tennessee, The Center for Environmental Biotechnology, Feb. 9, 1998.
59. Importance of Microbial Diversity in Anaerobic Waste Treatment Systems. XIV Turku Microbiology Symposium on Modern Methods for Microbial Detection and Identification, The University of Turku, Turku, Finland, Oct. 24, 1997.
60. Environmental Biotechnology at the University of Illinois, Molecular Techniques in Biological Waste Treatment Systems, CNRS-UIUC workshop, Paris, France, Sept. 9-10, 1997.
61. Livestock Waste Management, Role of Microbial Ecologists and Environmental Biotechnologists, Illinois House-Senate Joint Livestock Advisory Committee, July 10, 1997.
62. Microbial Population Dynamics in Anaerobic Bioreactors, 14th Industrial Microbiology Symposium – Fundamentals of Biodiversity, University of Puerto Rico, March 21, 1997.
63. Molecular Ecology of Gut Ecosystems, Department of Animal Sciences, UIUC, April 4, 1996.
64. Molecular Studies of Microbial Population Dynamics in Biological Treatment Systems, University of Iowa, March 29, 1996.

Invited Conference/Symposium Presentations

1. Raskin, L., Retooling anaerobic digestion to maximize waste carbon conversion in a circular bioeconomy, Inaugural CAS Spotlight Symposium, University of Buffalo, Buffalo, NY, October 25-26, 2024.
2. Raskin, L., Fairley-Wax, T., and Skerlos, S., Biotechnology & Biomanufacturing session at the Canadian Chemical Engineering Conference, Toronto, Dynamic membrane bioreactors (DMBRs) to intensify and expand anaerobic digestion applications, October 6-9, 2024.
3. Thomas Lippert, Heather Nielsen, Yupo Lin, Kuang Zhu, Pedro Puente, Steve Skerlos, Lutgarde Raskin, and George Wells, Integrating biochemical and electrochemical technologies (IBET) for highly efficient conversion of organic wastes to pipeline ready renewable natural gas, 2024 Symposium on Biotechnology for Fuels and Chemicals (SBFC) in Alexandria, VA, April 28 – May1, 2024
4. Raskin, L., Fairley-Wax, T., and Skerlos, S., Dynamic membrane bioreactors (DMBRs) to intensify and expand anaerobic digestion applications, Invited workshop presentation "Applying dynamic membranes to AnMBR systems", 18th IWA World Congress on Anaerobic Digestion (AD-18), Istanbul, Turkey, June 2-6, 2024.
5. Enhancing Anaerobic Processes through Understanding Microbial Community Structure and Function, Keynote Lecture, 18th IWA World Congress on Anaerobic Digestion (AD-18), Istanbul, Turkey, June 2-6, 2024.
6. Potgieter, S., Lahr, R., Alfahham, N., Lee, S., Sandoval, S., Guo, Y., Steglitz, B & Raskin, L. Culture-independent methods to investigate the impact of UV irradiation on drinking water microbial communities. Special Topic Session (STS) titled "Standard culture- and advanced molecular-based testing for microbiology: the cornerstone for the protection of public health". Water Quality and Technology Conference (WQTC), Dallas, Texas, USA, November 2023.
7. Fairley-Wax, T., Raskin, L., Skerlos, S. (2023) Our Research Journey from Conventional MBRs to Dynamic MBRs in Anaerobic Applications. WEF/IWA Innovations in Process Engineering Conference 2023, June 6-9, Portland, OR.
8. Potgieter, S., Vosloo, S., Dowdell, K., Vedrin, M., Lahr, R., Page, S., Pinto, A & Raskin, L. The role of biofiltration in shaping drinking water distribution system nitrifier populations, MAC-EPID pre-symposium workshop, "Ecology, evolution and the microbiome: From mechanisms to translation. Michigan, USA, March 2023

9. Raskin, L., Impact of disinfection on the microbiome in drinking water systems, Gordon Research Conference "Water disinfection, byproducts and health" July 30 - August 4, 2023, Mount Holyoke College, South Hadley, MA.
10. Raskin, L., Researcher-Utility Partnerships for Improving Microbial Drinking Water Quality and Reduce the Risk of Opportunistic Infections, Rittmann Distinguished Lecture speaker at the Center for Water Innovation Research Symposium, Washington University in St. Louis, April 24, 2023.
11. Raskin, L., Standing on the shoulders of giants - Reflections on how we introduced molecular microbial ecology to the field of anaerobic digestion, McCarty Symposium, December 2021
12. Raskin, L., Potential of molecular biology tools in anaerobic digestion, Workshop: Anaerobic Digestion – Quo Vadis? Valladolid, Spain, October 21, 2021
13. Raskin, L., 2021 WEF-AEESP Master Lecturer, Resource Recovery From Organic Waste Streams by Anaerobic Biotechnologies, WEFTEC Online, Nov. 16-18, 2021.
14. Raskin, L., Fairley, T., Skerlos, S. Role of biofilms in anaerobic technologies for resource recovery from waste streams. Keynote Lecture, Virtual, International Water Association (IWA) Biofilms Specialist Conference, Dec 5 – 9, 2020.
15. Vedrin, M., Hardin, R., Raskin, L. (2020). Innovative Researcher-Utility Partnerships for Advancing Microbial Drinking Water Quality Management. Michigan Water Environment Association Lab Practices Seminar.
16. Raskin, L., What do we need to focus on to transform the microbial ecology and water engineering field? IWA Microbial Ecology and Water Engineering (MEWE) Specialist Group Arden-Lockett Award Lecture, MEWE Specialist Group Conference, Nov. 17-20, 2019, Hiroshima, Japan.
17. Raskin, L., Engineering Anaerobic Microbiomes to Improve Resource Recovery From Urban Waste Streams, Plenary Lecture, 16th IWA World Congress on Anaerobic Digestion (AD-16), Delft, The Netherlands, June 23-27, 2019.
18. Raskin, L., X. Fonoll Almansa, and S. Shrestha, Developing novel anaerobic bioprocesses to recover high-value resources from urban organic waste streams, 41st Symposium on Biotechnology for Fuels and Chemicals, April 28 – May 1, 2019, Seattle, WA
19. Olson, T.M., S. Page, Q. M. Bautista, K. Dowdell, M. Prasad, L. Sanford, B. Steglitz, L. Raskin (2018), Optimizing Filter Operation in an Ozone-Biofiltration Plant in Michigan with a focus on Reducing Selection for Opportunistic Pathogens in Drinking Water Production, Workshop PCW02 – Implementing Drinking Water Biofiltration in Cold Weather Conditions, Water Quality Technology Conference (WQTC), Toronto, ON, Nov. 11-15.
20. Raskin, L., Invited keynote presentation in "Managing microbial communities" session, 17th International Symposium on Microbial Ecology, ISME17, Aug. 12-17, 2018, Leipzig, Germany.
21. Raskin, L., Managing the Drinking Water Microbiome, Keynote Presentation, The 15th International Water Association Leading Edge Conference on Water and Wastewater Technologies, Nanjing, China, May 27-31, 2018.
22. Raskin, L., Invited workshop presenter and panelist, "Changing with the Times: What You Need to Know About Publishing Today," The 15th International Water Association Leading Edge Conference on Water and Wastewater Technologies, Nanjing, China, May 27, 2018.
23. Raskin, L., Designing Microbiomes in Environmental Biotechnology Applications, Workshop: Microbiome Engineering, April 27, 2018, Madison, Wisconsin.
24. Raskin, L., What have environmental engineers learned about controlling microbiomes? Unmasking Common Principles Governing the Microbiome, Madison Microbiome Meeting (M3), April 25-26, 2018, Madison, Wisconsin.
25. Raskin, L., S.-J. Haig, N. Kotlarz, and J. J. LiPuma, Explaining the presence of respiratory tract opportunistic bacterial pathogens in drinking water systems, ES&T Symposium, 253rd American Chemical Society National Meeting & Exposition, April 5, 2017, San Francisco, CA.
26. Raskin, L., The need for Biofilm-Enhanced Anaerobic Membrane Bioreactors, Workshop Aerobic and Anaerobic Membrane Bioreactors, November 25, 2016, University of Leuven, Leuven, Belgium.
27. Raskin, L., Managing the drinking water microbiome, European Centre of Excellence for Sustainable Water Technology (WETSUS) Congress 2016, Oct. 4, 2016, Leeuwarden, The Netherlands.
28. Raskin, L., Environmental Mycobacteria in Chloraminated Drinking Water Systems, 16th International Symposium on Microbial Ecology, ISME, Aug. 25, 2016, Montreal, CA.
29. Raskin, L., Managing the Drinking Water Microbiome, Plenary Session The Urban Water Cycle Microbiome, ASM Microbe 2016, June 18, 2016, Boston, MA.

30. Raskin, L., M. Kaufman, B. Kerkez, C. Xi, and T.M. Olson, Can Real-Time Monitoring and Data Science Reduce the Public Health Impacts of Aging Water Infrastructure in Our Cities? 2016 UM-SJTU Research Symposium Data Sciences for Sustaining Critical Infrastructures for the Environment and Human Health, April 21, 2016, Ann Arbor, MI
31. Raskin, L., Microbial ecology and anaerobic digestion: the need for microbial resource management, Closing lecture in workshop "Microbial ecology of anaerobic digestion: Application to the hot topic of low-temperature AD", Punta Arenas, Chile, November 11-14, 2015.
32. Raskin, L., Anaerobic membrane bioreactor treatment of domestic wastewater at psychrophilic temperatures, Invited contribution in workshop "Anaerobic Membrane Bio-Reactors (AnMBR) for Resource Recovery: Biosolids Avoidance and Energy Generation from Wastewater", WEF/IWA Residuals and Biosolids Conference 2015: The Next Generation of Science, Technology, and Management, Washington, DC: June 7 – 10, 2015.
33. Raskin, L., Anaerobic membrane bioreactor research – from idea generation to technology implementation, Frontiers of Water Treatment Symposium, University of Minnesota, May 18 2015, Minneapolis, MN.
34. Raskin, L., Managing microbial communities in anaerobic membrane bioreactors, Engineering and Control of Natural and Synthetic Microbial Communities, Isaac Newton Institute for Mathematical Sciences, Nov. 26-28, 2014, Cambridge, UK
35. Raskin, L., A decade of anaerobic membrane bioreactor research – from ideas to implementation, Association of Environmental Engineering and Science Professors (AEESP) Luncheon Lecturer, WEFTEC 2014, Sept. 30, 2014, New Orleans, LA
36. Pinto, A. and Raskin, L., Bacterial community dynamics in the drinking water microbiome, 15th International Symposium on Microbial Ecology (ISME15), August, 24-29, 2014, Seoul, South Korea
37. Raskin, L., Anaerobic biological treatment processes and environmental biotechnology, Workshop, WEFTEC 2013, Oct. 5-9, 2013, Chicago, IL, Mainstream Anaerobic and Nutrient Removal Systems for Energy Neutral Wastewater Management.
38. Clancy, T.M., T. Chiao, A. Pinto, L. Raskin, Assessing the Role of Backwashing and Disinfection on Microbial Water Quality and Community Dynamics in Biofilters, AWWA 2013 Annual Conference and Exposition (ACE) in Denver, Colorado, June 9-13, 2013.
39. Raskin, L., Role of microbial ecology in optimizing biofiltration for drinking water treatment. Keynote Lecture, 5th International Conference, Microbial Ecology and Water Engineering 2013 (MEWE 2013), Ann Arbor, Michigan, July 7 – 10, 2013.
40. Raskin, L., Microbial Ecology of Engineering Anaerobic Bioreactor Systems, Plenary Lecture, 13th World Congress on Anaerobic Digestion: *Recovering (bio) Resources for the World*, Santiago de Compostela, Spain, June 25-28, 2013.
41. Smith, A.L., and L. Raskin, Microbial diversity analysis: methods and tools. *Molecular Biology Tools (specialized short course for 13th World Congress on Anaerobic Digestion)*, University of Minho, Braga, Portugal, June 23-24, 2013.
42. Raskin, L., Practicing microbial resource management in environmental biotechnology through application of molecular biology and ecology tools, WERF Paul Busch Awardee/AEESP Technical Session, *85th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC)*, New Orleans, LA, Sept. 29-Oct. 3, 2012.
43. Raskin, L., Ohio-Kentucky-Indiana Regional Symposium on Applications of Bio-membranes in Science and Technology, Sept. 30, 2011, Cincinnati, Ohio.
44. Raskin, L., Diversity and dynamics of microbial communities in anaerobic bioreactors and their implications for process optimization, International Conference on Biogas Microbiology, Helmholtz-Zentrum für Umweltforschung – UFZ, The German Biomass Research Centre (DBFZ), Sept. 14-16, 2011, Leipzig, Germany
45. Brown, J.C., G. Upadhyaya, T. M. Clancy, K. F. Hayes, and L. Raskin, Simultaneous Removal of Multiple Contaminants from Drinking Water Using Fixed-bed Anaerobic Bioreactors, International Water Association Leading Edge Technology (LET) Conference, Amsterdam, The Netherlands, June 6-10, 2011.
46. Giridhar Upadhyaya, Tara M. Clancy, Alyssa Jenkins, Kathryn Snyder, Jess C. Brown, Kim F. Hayes, and Lutgarde Raskin., Biologically Mediated Removal of Multiple Contaminants from Drinking Water Sources, MAC-EPID Pre-Symposium, School of Public Health, University of Michigan, March 31, 2011.

47. Smith, A.L., H.J. Dorer, N.G. Love, S.J. Skerlos, and L. Raskin, Methane Production from Domestic Wastewater using Anaerobic Membrane Bioreactors, Presented at *Biogas Summit*, Flint, Michigan, October 29, 2010.
48. Raskin, L., Does disinfection increase the virulence of bacteria? Association of Environmental Engineering and Science Professors (AEESP) 2009 Conference - Grand Challenges in Environmental Engineering and Science: Research and Education, July 26-29, 2009, Iowa City, Iowa
49. Raskin, L., Antimicrobials, antimicrobial resistance, and the link with disinfectants, IWA Leading Edge Conference on Water and Wastewater Treatment Technologies, June 23-25, 2009, Singapore.
50. Upadhyaya, G., J. Jackson, K. Hayes, J. Brown, and L. Raskin, Simultaneous Removal of Nitrate and Arsenic from Drinking Water Sources using Fixed-bed Biologically Active Carbon (BAC) Filters MI American Water Works Association's Research & Technical Practices (RTP) May Seminar, Lansing, MI, May 19, 2009.
51. Raskin, L., Survival Mechanisms of Bacterial Pathogens in Drinking Water Distribution Systems, Workshop on Biofilms in Engineered Water Systems: Safety, Treatment and Technology Innovation, Georgia Tech Global Learning and Conference Center, Atlanta, GA, Oct. 29-30, 2008.
52. Raskin, L., Diversity and dynamics of microbial communities in anaerobic bioreactors and their implications for process stability, Anaerobic Treatment Short Course, Anaerobic Treatment of High-Strength Industrial and Agricultural Wastes, Marquette University, Milwaukee, Wisconsin, Sept. 18-19, 2008.
53. Raskin, L., Does the use of antimicrobials in agriculture impact water quality?, MI American Water Works Association's Research & Technical Practices (RTP) May Seminar, Lansing, MI, May 20, 2008.
54. Raskin, L., Survival Mechanisms of Bacterial Pathogens in Drinking Water Distribution Systems, MI American Water Works Association's Research & Technical Practices (RTP) May Seminar, Lansing, MI, May 15, 2007.
55. Raskin, L., Population Dynamics of Syntrophic Bacteria and Methanogens in Anaerobic Bioreactors, 104th American Society of Microbiology General Meeting, New Orleans, LA, May 23-27, 2004.
56. Raskin, L. and E. Morgenroth, Opportunities for Nutrient Recovery from Animal Residues, University of Illinois Pork Industry Conference – Swine Odor and Manure Management, Champaign, IL, Dec. 11-12, 2003.
57. Crawford-Simmons, J.J., S. Padmasiri, T. Duangmanee, S. Sung, and L. Raskin, Microbial Community Analysis in Hydrogen-Producing Continuous Flow Bioreactors, Society for Industrial Microbiology Annual Meeting 2003, Minneapolis, MN, Aug. 10-12, 2003.
58. Raskin, L., Microbial ecology of anaerobic solid waste processing, EU Summer School "Biotechnology in organic waste management: from disposal to resource recovery", Wageningen, The Netherlands, June 29-July 4, 2003.
59. Raskin, L., D. Frigon, H. Vervaeren, and W. Verstraete, Molecular tools in wastewater studies: Science research yesterday, process investigations today, routine analysis tomorrow? IWA Leading Edge Conference Series – Global Conference on Leading Edge Water and Wastewater Treatment Technologies, Noordwijk/Amsterdam, The Netherlands, May 26-28, 2003.
60. Morgenroth, E., Y.C. Choi, and L. Raskin, Competition between perchlorate reducing bacteria and other heterotrophs under perchlorate limiting conditions, American Society for Microbiology, 103rd General Meeting, Washington D.C., May 18-22, 2003.
61. Raskin, L., C. Xi, and D. Zheng, Use of molecular probes to study biofilm composition, Biofilms in Industry, Medicine and Environmental Biotechnology: The Science, Galway, Ireland, Aug. 24-29, 2002.
62. Raskin, L., K.D. Rausch, M.E. Tumbleson, B.J. Daugherty, L.T. Angenent, R.M. Agbisit, and R.L. Belyea, Nutrient Recovery from Food Processing Industry Waste Streams, Corn Utilization & Technology Conference (CUTC), Kansas City, MO, June 3-5, 2002.
63. Agbisit, R., M.B. Daugherty, K.D. Rausch, L. Raskin, R.L. Belyea, T. Clevenger and M. E. Tumbleson, The Routing of Nutrients in the Corn Wet Milling Process and Opportunities for Recovery and Recycling from Waste Streams Using Environmental Biotechnology, Engineering and Processing Division Symposium, American Association of Cereal Chemists Annual Meeting, Charlotte, NC, Oct. 14-17, 2001.
64. Frigon D., D.B. Oerther, and L. Raskin, Oligonucleotide Probe Hybridization and Modeling Results Suggest that Populations Consuming Readily Degradable Substrate in Plug-flow Reactors Have High Cellular RNA Levels, Fifth Kollekolle Seminar on Activated Sludge Modelling, Kollekolle, Denmark, Sept. 10-12, 2001.

65. Raskin, L., Molecular probes to understand anaerobic digestion, Anaerobic Digestion, World Congress, Antwerp, Belgium, Sept. 2-5, 2001.
66. Raskin, L., Microbial Community Structure in Anaerobic Waste Treatment Systems, Ninth International Symposium on Microbial Ecology, Amsterdam, The Netherlands, August, 26-31, 2001.
67. Raskin, L., Quantification of rRNA with molecular beacons in microfluidic channels and applications in environmental microbiology, Gordon Research Conference on Applied and Environmental Microbiology, Connecticut College, July 21-26, 2001.
68. Raskin, L., Quantification of rRNA with Molecular Beacons in Microfluidic Channels, American Society for Microbiology, 101th General Meeting, Orlando, FL, May 20-24, 2001.
69. Raskin, L., Molecular microbial ecology of wastewater treatment systems, Gordon Research Conference on Environmental Sciences: Water, Environmental Pressures and Chemical Pathways from the Molecular to Ecosystem Scale, Holderness School, Plymouth, New Hampshire, June 25-30, 2000.
70. Raskin, L., Quantification of microbial population abundance and activity in bioreactors by oligonucleotide probe hybridization, American Society for Microbiology 100th General Meeting, Los Angeles, CA, May 21-25, 2000.
71. Raskin, L., Use of Molecular Tools to Quantify Microbial Populations and Specific Growth Rates in Mathematical Models of Biological Treatment Processes, Association of Environmental Engineering and Science Professors (AEESP) Research Frontiers Conference, University Park, PA, Aug. 1-3, 1999.
72. Oerther, D.B., J.R. Danalewich, and L. Raskin, Biological Nutrient Removal from Food Processing Waste Streams, 1998 Corn Utilization & Technology Conference, St. Louis, MO, June 1-3, 1998.
73. Oerther, D.B., F.L. de los Reyes, and L. Raskin, Interfacing Phylogenetic Oligonucleotide Probe Hybridizations with Representations of Microbial Populations and Specific Growth Rates in Mathematical Models of Activated Sludge Processes, Fourth Kollekolle Seminar on Activated Sludge Modelling, Modelling and Microbiology of Activated Sludge Processes, Kollekolle, Denmark, March 16-18, 1998.
74. Raskin, L., D. Zheng, M.E. Griffin, and F. de los Reyes, Molecular Studies of Microbial Population Dynamics in Biological Treatment Systems, 9th Forum for Applied Biotechnology, Ghent, Belgium, Sept. 27-29, 1995.
75. Raskin, L., M.E. Griffin, and D. Zheng, Use of Ribosomal RNA-Based Methods to Study Microbial Population Dynamics in Anaerobic Bioreactors, 1995 Society for Industrial Microbiology Annual Meeting, San José, CA, Aug. 6-11, 1995.
76. Raskin, L., D. Zheng, M.E. Griffin, P.G. Stroot, and P. Misra, Characterization of Microbial Communities in Anaerobic Bioreactors Using Molecular Probes, International Meeting on Anaerobic Processes for Bioenergy and Environment, Copenhagen, Denmark, Jan. 25-27, 1995.
77. Raskin, L., Use of Ribosomal RNA Based Molecular Probes for Characterization of Complex Microbial Communities During a Long-Term Study of Anaerobic Biofilm Reactors, International Research Seminar on Biological Degradation of Organic Chemical Pollutants in Biofilm Systems, Copenhagen, Denmark, May 19-21, 1994.
78. Raskin, L., Structural and Functional Analysis of Anaerobic Biofilm Communities Using Oligonucleotide Probe Hybridizations, Mini-Symposium, Environmental Chemistry and Chemical Ecology, Institute for Environmental Studies, University of Illinois, Urbana, IL, Aug. 26-27, 1993.

TEACHING EXPERIENCE AND ACTIVITIES

University of Michigan

<i>Number</i>	<i>Name</i>	<i>Co-Taught With</i>	<i>Semester</i>
CEE 200	Introduction to Civil and Environmental Engineering		Winter 14 Fall 16 Winter 17
CEE 365 (CEE 360)	Environmental Process Engineering		Winter 09 Winter 10 Fall 10
CEE 366	Environmental Engineering Laboratory		Winter 14 Winter 19 Winter 21 Winter 22 Winter 23 Winter 24
CEE 592	Biological Processes in Environmental Engineering		Winter 06 Winter 07 Winter 08 Winter 13 Fall 13 Fall 14
CEE 482/ CEE 582	Environmental Microbiology		Fall 06 Fall 07 Fall 08 Fall 09 Fall 10 Fall 12 Fall 17 Fall 22 Fall 23 Fall 24
CEE 880	Seminar in Environmental and Water Resources Engineering		Fall 05 Winter 06 Fall 06 Winter 07 Fall 07 Winter 08 Winter 10 Winter 11 Winter 13 Winter 14 Winter 15 Winter 16 Winter 17 Winter 25
CEE 881	Civil and Environmental Engineering Seminar for New Graduate Students		Fall 09 Fall 10 Fall 12 Fall 13 Fall 14

Fall 15
Fall 16
Fall 24

University of Illinois at Urbana-Champaign

<i>Number</i>	<i>Name</i>	<i>Co-Taught With</i>	<i>Semester</i>
CEE 437 (CEE 342)	Water Quality Control Processes		Fall 97 Fall 98 Fall 99 Fall 00 Fall 01 Fall 04 Fall 93
CEE 343	Chemical Principles of Environmental Engineering Processes		Fall 94 Fall 95 Spring 97
CEE 346	Biological Principles of Environmental Engineering Processes The majority of this course (3/4) was taught by PhD student, Daniel Oerther, while I served as a mentor to provide guidance and feedback throughout the semester.	PhD Student Daniel Oerther and Assistant Professor Rob Sanford	Spring 01 Spring 02 Spring 94 Spring 95 Spring 96 Spring 97 Spring 98 Spring 99
CEE 538 (CEE 442)	Processes for Water Quality Control, II This course was taught by postdoctoral research assistant, Lars Angenent, while I served as a mentor to provide guidance and feedback throughout the semester.	Lars Angenent	Spring 00 Spring 04 Spring 05 Fall 99 Spring 00 Spring 95 Fall 01 Spring 02
CEE 495 G	Civil and Environmental Engineering Seminar		
CEE 495 AG	Civil and Environmental Engineering Seminar		

Organization of Short Courses and Workshops

de los Reyes, F., L. Raskin, R. Starostka, X. Fonoll Almansa, (2022), Workshop, Anaerobic digestion, a technology to help solve Water, Sanitation, and Hygiene (WASH) concerns in resource constrained communities, IWA Anaerobic Digestion Conference (AD17), June 18, 2022

Ziels, R., M. Scarborough, M., K. Zhu, R. Starostka, O. Schraa, M. Zamanzadeh, C. Owerdieck, S. Skerlos, and L. Raskin (2022), Workshop, Expanding the horizon for anaerobic digestion modeling, IWA Anaerobic Digestion Conference (AD17), June 19, 2022

Fairley-Wax, T., K. Zhu, S. Skerlos, and L. Raskin (2022), Workshop, Can we use dynamic membrane bioreactors (DMBRs) to intensify and expand AD applications? IWA Anaerobic Digestion Conference (AD17), June 17, 2022

Rauch-Williams, T. et al. Water Research Foundation Co-digestion modeling workshop, September 2021

Fairley-Wax, T., K. Zhu, S. Skerlos, and L. Raskin (2021), Workshop, Harnessing biofilms for low-pressure filtration: Dynamic membrane bioreactor characterization, operation, and scale-up, IWA Biofilm Conference, December 2021

Fonoll Almansa, X., M. Roach, A. Forbis-Stokes, M. Vedrin, G. D. Tchouty, L. Raskin, and M. Deshusses (2018), Anaerobic digestion, a technology to help solve water, sanitation and hygiene related issues in developing countries, 2018 Colorado WASH Symposium, March 6-7, Boulder, CO.

van Velden, G., M. Vedrin, J. Contreras, K. Baker, K. Latham (faculty support L. Raskin, R. Hardin, J. Eisenberg) (2018), Partnering Practitioners and Researchers in Developing Impactful WASH Work: the Future of Sanitation Research and Interventions, 2018 Colorado WASH Symposium, March 6-7, Boulder, CO.

Smith, A.L., D. Batstone, and L. Raskin, 2012. Workshop on Anaerobic Treatment of Low-Strength Wastewaters. *Leading Edge Technology (LET) Conference on Water and Wastewater Technologies*, June 3-7, Brisbane, Australia.

College of Engineering Responsible Conduct of Research and Scholarship workshop on “Reporting Research Results in Peer Reviewed Journals”, May 3, 2011, University of Michigan.

Workshop, Fluorescence In Situ Hybridization, February 2005, Short course (2 ½ days) attended by a group of nine graduate students and post-docs from the University of Illinois, University of Texas at Austin, and University of Notre Dame.

Workshop, Quantitative Oligonucleotide Probe Hybridization, January/February 2004, UIUC. Short course (2 weeks) attended by a group of 11 graduate students and post-docs from the University of Illinois, Iowa State University, and University of Washington.

Biological Principles and Engineering of Water Quality Control, July 26, 2002, UIUC. Short course (3 hours) attended by a group of 20 students from Seoul National University, Korea.

Introduction to Molecular Microbial Ecology, February 1999, UIUC. Short course (4 weeks) attended by a group of 10 graduate students and post-docs from the Departments of Civil and Environmental Engineering and Animal Sciences, UIUC.

Teaching Improvement Activities

Participated in UM CRLT Workshop Evidence-Based Teaching Practices to Shape Your Response to GenAI Writing Tools, July 26, 2023

Participated in UM CRLT Workshop Developing a Plan for Addressing GenAI Writing Tools in your Classroom this Fall, Aug. 9, 2023

Collaborated with environmental engineering faculty at three other universities to develop remote environmental engineering laboratory courses. Presented our experience at several seminars/conferences.

- Puente, P., Masten, S., Aggarwal, S., Kirisitis, M., Raskin, L., Environmental Engineering Laboratory from Home Overcoming Remote Learning Challenges, Enriching Scholarship 2021, Ann Arbor, MI, May 3 – 5, 2021.
- Puente, P., Masten, S., Aggarwal, S., Kirisitis, M., Raskin, L., Environmental Engineering Lab to Kitchen, MSU Teaching seminar, East Lansing, MI, May 6, 2021.
- Puente, P., Masten, S., Aggarwal, S., Kirisitis, M., Raskin, L., Environmental Engineering Laboratory Courses: From a University Teaching Lab to a Home Kitchen, AEESP Conference. St. Louis, Missouri, June 28-20, 2022.

Participated in UM CRLT Workshop Best Practices for Running a Flipped Classroom: Roundtable Discussion for Engineering Faculty, May 28, 2014

Participated in a semester-long teaching course (Teaching College), Fall 1994.

Participated in UIUC College of Engineering Seminars for Teaching Improvement and Graduate College Symposia:

The Feminization of Graduate Education: A Life-course View by Mary Ann Mason, Feb. 21, 2005;
 Why Women Leave Engineering and What We Can Do About It by Elaine Seymour, April 9, 2004;
 Effective, Efficient Teaching by Phillip C. Wankat, Jan. 28, 2004;
 Lecturing Tips, Jan. 25, 1996;
 Utilizing Teaching Assistants Wisely, Oct. 31, 1995;
 The Seven Principles of Good Teaching, Oct. 11, 1994;
 Asking and Answering Questions to Stimulate Classroom Discussion, Feb. 22, 1994;
 The Relationship of Learning Styles to Effective College Teaching and Learning in Engineering Classes, Feb. 17, 1994;
 Using Early Student Feedback for Improvement of Teaching, Jan. 25, 1994.

Teaching Awards

2017 Rackham Distinguished Graduate Mentor Award, UM.

Spring semesters 2005, 2004, 1997, and Fall 2004: "Incomplete List of Teachers Ranked as Excellent by Their Students".

Ph.D. Students Graduated

<i>Name</i>	<i>Work Period</i>	<i>Dissertation Title</i>	<i>Placement</i>
Matthew Vedrin (co- advised with R. Hardin),	01/17-01/23	Investigating Full-Scale Distribution System Flushing Practices for Better Drinking Water Quality Management	Postdoctoral Fellow, University of Texas, Austin, vedrin@umich.edu
Katherine Dowdell (co- advised with J. LiPuma),	08/17-07/22	Assessment of the Impact of Treatment and Distribution on the Occurrence of Nontuberculous Mycobacteria and Free-Living Amoebae in Full- Scale Drinking Water Systems	Postdoctoral Fellow, University of Texas, kathdowd@umich.edu
Emily Crossette (co- advised with K. Wigginton)	07/15-12/20	Microbial diversity and antimicrobial resistance in land applied manure	Scientist I, Modeling and Statistics, Vedanta Biosciences, Inc., Boston emcrosse@umich.edu
Nicole Rockey (co- advised with K. Wigginton)	07/15-12/20	Novel approaches to monitor virus fate through water treatment processes	Assistant Professor, Duke University nrockey@umich.edu
Shilva Shrestha	09/16-12/20	Engineering Anaerobic Microbiomes for Medium Chain Carboxylic Acids Production from Waste Streams	Assistant Professor, Johns Hopkins University shilva@umich.edu
Raghav Reddy (co- advised with A. Agrawal)	01/16-01/20	Arsenic in Bangladesh's Drinking Water: Evaluating Factors That Have Hindered Two Decades of Mitigation Efforts, and the Opportunities to Address Them	Research Assistant, University of Michigan rrreddy@umich.edu
Caroline Van Steendam (co-advised with S. Skerlos and I. Smets)	08/14-08/19	Advancing Anaerobic Membrane Bioreactors for Low Temperature Domestic Wastewater Treatment	Wastewater Manager, Azulatis n.v. , Belgium steendam@umich.edu , cvsteendam@gmail.com
Nadine Kotlarz (co- advised with J. LiPuma)	05/13-05/17	Factors of Full-Scale Drinking Water Treatment that Contribute to Risk of Opportunistic Infectious Disease	Assistant Professor, North Carolina State University nkotlar@ncsu.edu
Xunchang Fei (co- advised with D. Zekkos)	01/11-01/16	Experimental assessment of coupled physical- biochemical-mechanical-hydraulic processes of municipal solid waste undergoing biodegradation	Associate Professor, Nanyang Technological University, Singapore xcfei@ntu.edu.sg

Tara Webster (formerly Clancy) (co-advised with K. Hayes)	09/09-01/15	Biogeochemical evaluation of disposal options for arsenic-bearing wastes generated during drinking water treatment	Physical Sciences/Researcher Scientist Air Quality and Health Workgroup, Colorado Department of Public Health & Environment taramwebs@gmail.com
Adam Smith (co-advised with S. Skerlos)	06/09-08/14	Treatment of domestic wastewater with anaerobic membrane bioreactors	Associate Professor, Astani Department of Civil and Environmental Engineering University of Southern California smithada@usc.edu
Monisha Brown (co-advised with J. Diana)	01/08 – 05/13	Microbial Resource Management in Indoor Recirculating Shrimp Aquaculture Systems	Project Engineer, H2M architects + engineers, Parsippany, New Jersey monisha.brown@gmail.com
Giridhar Upadhyaya (co-advised with K. Hayes)	08/06-09/10	Biologically-mediated, Simultaneous Removal of Nitrate and Arsenic from Drinking Water Sources	Water and Reuse Process Leader, Brown & Caldwell, Orange County, CA, giridharu5@gmail.com
Dongjuan Dai (co-advised with C. Xi)	07/05-09/10	Development of mixed-species biofilms and genetic mechanisms of species interactions in biofilms	Senior Test Engineer at Ginkgo Bioworks, Inc. Boston, MA ddai@ginkgobioworks.com daidj03@gmail.com
David Berry (co-advised with C. Xi)	06/07-08/09	Molecular and Ecological Mechanisms of Bacterial Response to the Drinking Water Disinfectant Monochloramine	Professor, Division of Microbial Ecology, University of Vienna david.berry@univie.ac.at
Xu Li (co-advised with E. Morgenroth)	08/03-09/08	Biological Treatment of Perchlorate and Nitrate Contaminated Drinking Water – Optimization of System Performance Using Microbial Community Characterization	Professor, University of Nebraska-Lincoln, Lincoln, NE xuli@unl.edu
Sudini Padmasiri (co-advised with E. Morgenroth)	08/03-09/07	Effect of high shear on anaerobic digestion in an anaerobic membrane bioreactor (ANMBR) treating high strength wastewater	Senior Concept Engineer-Shales Projects, Shell Exploration and Production Company, Houston, TX sudini@gmail.com ; Sudini.Padmasiri@shell.com
Toshio Shimada-Beltran (co-advised with J. Zilles and E. Morgenroth)	08/02-05/07	Effects of macrolide antimicrobials on anaerobic treatment systems	Principal Technologist, Carollo Engineers, Dallas, TX TShimada@carollo.com
Zhi Zhou (co-advised with J. Zilles)	08/02-05/07	Evaluation of macrolide-lincosamide-streptogramin B (MLS _B) antimicrobial resistance at swine farms	Associate Professor of Civil Eng. and Environmental and Ecological Eng., Purdue Univ. zhizhou@purdue.edu
Young Chul Choi (co-advised with E. Morgenroth)	08/01-12/05	Biological perchlorate removal from drinking water	Water Treatment and Desalination Specialist at Saudi Aramco youngchul.choi@gmail.com
Dominic Frigon	01/99-12/04	Mechanism explaining seasonal biological foaming in activated sludge wastewater treatment systems:	Associate Professor, McGill University, Montreal, Quebec

Daniel Oerther	08/98-06/02	foam-causing bacteria specialize in consuming lipids Using molecular signature methods to measure the in situ physiology of <i>Acinetobacter</i> spp. in enhanced biological phosphorus removal activated sludge wastewater treatment	dominic.frigon@mcgill.ca Professor, John A. and Susan Mathes Chair of Environmental Engineering, Missouri University of Science and Technology, Rolla, MO oertherd@mst.edu
Jess Brown (co-advised with V. Snoeyink)	01/99-01/02	Abiotic and biotic perchlorate removal in an activated carbon filter	Senior Vice President, R&D Practice Director, Carollo Engineers, Inc., San Clemente, CA jbrown@Carollo.com
Francis de los Reyes	08/94-12/99	Filamentous foaming in activated sludge systems: A study combining molecular and engineering approaches	Professor, Dept. of Civil, Construction, and Environmental Engineering, North Carolina State University, Raleigh, NC fidelosr@ncsu.edu
Dandan Zheng	08/95-03/99	Evaluation of granulation processes in upflow anaerobic sludge blanket reactors using oligonucleotide probe hybridizations	Director of Bioscience Quality and Regulatory Affairs for China, Grifols Shared Services North America, Inc., Los Angeles, CA dandan.zheng@grifols.com Aikofirst2016@gmail.com

M.S. Students Graduated (With Thesis)

<i>Name</i>	<i>Work Period</i>	<i>Thesis Title</i>	<i>Placement</i>
Petia Tontcheva (co-advised with E. Morgenroth)	08/05-08/07	Organic and inorganic membrane fouling mechanisms in anaerobic membrane bioreactors	Senior Chemist, Nalco Water, Naperville, Illinois
Shubhra Jain	08/04-10/06	Filamentous foaming in activated sludge systems	Independent Consultant, New Delhi, India
Jiangzhao "Amily" Zhang (co-advised with E. Morgenroth)	08/02-05/05	Effect of shear on membrane fouling in anaerobic membrane bioreactors treating swine waste	Project Engineer, Gannett Fleming, Woodbury, New York
Nicole Monteith (co-advised with E. Morgenroth)	08/02-07/04	Effect of erythromycin on nitrification	
Ning Tong (co-advised with B. Marinas)	08/01-08/03	Adaptive response in <i>Mycobacterium avium</i> when exposed to monochloramine	Environmental Restoration Department, Battelle, Columbus, OH
Sudini Padmasiri	08/01-08/03	Microbial community characterization of biological hydrogen removal systems	Technologist, Shell Projects and Technology, Utilities and Heat Transfer Group, Shell Oil Company, Houston, TX
Richard Lin (co-advised with E. Morgenroth)	07/01-08/03	Bacterial Community Analysis and Optimization of Biologically Active Carbon Filters Used to Remove Perchlorate from Groundwater	Montgomery, Watson, Herza, Walnut Creek, CA
Adam Klein	08/01-07/03	Using Molecular Techniques to Assess the Role of Novel Organisms in Biological Foaming at Wastewater Treatment Plants	Brown and Caldwell, Seattle, WA
Becky Luna (formerly Daugherty)	08/00-08/02	Anaerobic treatment of high sulfate waste streams to allow for the subsequent recovery of sulfur	Vice President, Carollo Engineers, Denver, CO
Archana Jindal	08/00-08/02	Antimicrobial Resistance in Swine Waste Treatment Processes	Carollo Engineers, Santa Ana, CA
Eva Arnaiz	02/00-09/00	Foaming potential of <i>Gordonia amarae</i> grown under different conditions. Is foaming linked to cell wall hydrophobicity?	Infilco, Madrid, Spain

Sandra Loor-Vela	08/98-08/00	Anaerobic dissipation of 14C-acetochlor in flooded soil microcosms	Executive Director CECIA (NGO), Quito, ECUADOR
Peter Stroot	08/94-07/99	Anaerobic co-digestion of municipal solid waste and biosolids under various mixing conditions	Managing Member at HemaGnosis, Spokane, WA
Daniel Oerther	08/95-08/98	Application of molecular tools for the analysis of biological foaming in activated sludge	Professor, Missouri University of Science and Technology, Rolla, MO
James Danalewich	01/96-07/98	Biological nutrient removal from domestic and milk processing wastewaters	Malcolm Pirnie Inc., White Plains, NY
Katherine McMahon (formerly Sauer)	08/95-10/97	Syntrophic and methanogenic population dynamics during the anaerobic codigestion of municipal solid waste and sewage sludge	Professor, University of Wisconsin, Madison
Ma. Fiorella de los Reyes	08/95-08/97	Detection and quantification of <i>Gordona amarae</i> strains in foaming activated sludge systems using a phylogenetic approach	Manila Water Company, Balara, Quezon City, Philippines
Ebru Dulekgurgen	01/95-02/97	Microbial population dynamics in sequencing batch reactors for biological phosphorus removal using ribosomal RNA sequence analyses and oligonucleotide probe hybridizations	Assistant Professor, Istanbul Technical University, Environmental Engineering Department, Istanbul-Turkey
Theodore Papagiannis	01/95-08/96	Biological nutrient removal from dairy processing wastewater	Attorney, Knobbe Martens Olson & Bear LLP, Irvine, CA
Evanthia Tor (formely Malkos)	01/94-01/96	Bioremediation of naphtalene in soils of varying textures, nutrient concentrations, and hydrocarbon content	Massachusetts Department of Environmental Protection, Springfield, MA
Dandan Zheng	08/93-08/95	Characterization of microbial communities in anaerobic bioreactors using oligonucleotide probe hybridizations	Director, Quality operation at Grifols, Los Angeles, CA
Matthew Griffin	01/94-08/95	Use of molecular tools to enhance the evaluation of anaerobic co-digestion of the organic fraction of municipal solid waste and sewage sludge	Environmental Engineer, General Motors, MI

Additional M.S. Students Graduated (Non-Thesis Research)

Name	Work Period	Placement
Seth Sandoval-Skeet, sasando@umich.edu	09/22- 12/23	City of Ann Arbor drinking water treatment system pilot study (Impact of UV on opportunistic pathogens in drinking water systems)
Yuang Guo, yuangguo@umich.edu	09/22- 12/23	PhD student, Princeton University (Impact of UV on opportunistic pathogens in drinking water systems)
Savannah Wujastyk, smwujast@umich.edu	09/22-05/23	Brown & Caldwell, Seattle, WA (Medium-chain fatty acid production during anaerobic treatment of waste streams)
Katherine Giammalvo (co-advised with S. Skerlos), kgiamm@umich.edu	09/22-05/23	PhD student, University of Michigan (Dynamic membrane bioreactors for N removal)
Soojung Lee, Isoojung@umich.edu	09/21-12/22	PhD student, University of Michigan (Opportunistic pathogens in drinking water systems)
Tarrik Quneibi	01/22-03/22	SustainaBase (Unintended consequences of UV treatment of drinking water)
Daniela Tapia Pittzu	01/21-12/21	Dual degree MSE student (Opportunistic pathogens in drinking water systems)
Aini Sun	01/20-08/2021	Jacobs, Pittsburgh, PA (Opportunistic pathogens in drinking water systems)
Hang "Alex" Song	01/20-05/2021	PhD student, University of Michigan (Medium-chain fatty acid production during anaerobic treatment of waste streams)
Jeremy Nyitrai (co-advised with S. Skerlos)	09/19-08/2021	Gibraltar Industries (Anaerobic co-digestion of organic waste streams, Life Cycle Assessment)
Kirk Olson	09/19-06/2021	Kennedy Jenks, Sacramento, CA (Opportunistic pathogens in drinking water systems)
Sonja Gagen (co-advised with S. Skerlos)	09/18-12/19	High School teacher, Aspen, Colorado (Modeling of anaerobic membrane bioreactors)
Siqi Xue	09/18-12/19	Research Assistant (OPT), University of Michigan (Medium-chain fatty acid production during anaerobic treatment of waste streams)
Meghna Prasad	09/18-05/19	Staff Professional, Carollo Engineers, Inc., West Palm Beach, Florida (Optimizing Filter Operation in an Ozone-Biofiltration Plant to Reduce Selection for Opportunistic Pathogens in Drinking Water Production)
Freddy Ordonez	09/17-05/19	Field Engineer, Chevron, TX (Anaerobic MBR)

Brittany Colcord	09/17-12/18	Field Engineer, Chevron, TX (Medium-chain fatty acid production during anaerobic treatment of waste streams)
Tim Fairley (co-advised with S. Skerlos)	09/16-12/17	Research Laboratory Specialist, University of Michigan (Anaerobic membrane bioreactor)
Grace van Velden (MPH)	01/16-05/17	Admitted to MSE-PhD Bridge program in Environmental Engineering, Univ. of Michigan (Sustainability of arsenic removal processes in Bangladesh)
Grace Rodriguez (co-advised with K. Hayes and A. Agrawal; dual degree)	01/16-05/17	Consultant, Ramboll, Ann Arbor, MI (Sustainability of arsenic removal processes in Bangladesh)
Cindy Yao (co-advised with J. Diana; dual degree)	09/15-08/18	Energy Analyst, Bright Power, Inc., New York, NY (Recirculating shrimp aquaculture)
James Yonts	01/16-12/16	Staff Engineer II, Kleinfelder, Somerville, MA (Monitoring of corrosion and opportunistic bacterial pathogens in potable hot water pipe loop)
Nigel Beaton (co-advised with N. Love)	09/14-09/15	Staff Professional, Carollo Engineers, Inc., Portland, OR 97205 (Anaerobic Membrane Bioreactor Pilot-Scale System - worked through Jan. 2016)
Sean Murphy	09/14-12/15	City of Rockville, Department of Public Works (Waste Activated Sludge Anaerobic Contactor (WASAC))
Ben Kunstman (dual degree)	01/15-05/16	Staff Engineer, Environmental Integrity Project, Washington, DC, (Anaerobic digestion of lignocellulosics, research 01/15-08/15)
Pedro Puente	09/13-05/15	Lecturer, Universidad de las Fuerzas Armadas ESPE. Sede Santo Domingo, Ecuador (Treatment of domestic wastewater with anaerobic membrane bioreactors) - pdpuente@espe.edu.ec
Raghav Reddy (PhD track)	09/13-05/15	PhD student UM (Stability of arsenic solids produced during arsenic removal from drinking water sources)
Anton Dapcic (co-advised with N. Love)	03/13-12/14	Environmental Engineer, Carollo Engineers, Dallas (Waste Activated Sludge Anaerobic Contactor (WASAC))
Elizabeth Grobbel	09/13-12/14	Residency in Social Enterprise Fellow, New Sector Alliance, Boston, MA (Sustainable Aquaculture)
Ana Estrella You (research, co-advised with K. Hayes)	09/12-05/14	Operations Assistant, Industrial Area, GRUNTEC Environmental Services, Ecuador (Chromium monitoring in drinking water treatment plants)
Mark Poll	05/10-05/13	Product Environmental Engineer at Ford Motor Company, Detroit area, Biologically mediated removal of arsenic, nitrate, and uranium (research spring/summer 2010),
Ashley Hammerbeck	09/11-05/13	Process Engineer, Donohue & Associates, Inc., St. Louis Park, MN (Anaerobic membrane bioreactors for domestic wastewater treatment)
Kathryn Vanderweele Snyder (research, co-advised with K. Hayes)	09/12-05/13	Hazen and Sawyer, Coral Gables, Florida (Arsenic removal from drinking water sources)
Nadine Kotlarz (PhD track)	09/11-05/13	Postdoctoral Fellow, Univ. of Michigan (Biological nitrate and perchlorate removal from drinking water using various electron donors)
Ryan Darnton	08/12-12/12	
Tzu-Hsin Cindy Chiao	09/09-05/12	Dual degree MSE and MS in Sustainable Systems Engineering (Disinfection strategies for mixed microbial communities in drinking water systems), Water Resources Analyst, Otak, Seattle area
Andrea Trese	09/11-05/12	Associate Engineer at EOA, Inc., San Francisco Bay area (Monitoring drinking water distribution systems)
Alyssa Mayer (formerly Jenkins)	09/10-12/11	Assistant Engineer, Hazen and Sawyer, Cincinnati, OH (Biological removal of arsenic and nitrate from drinking water)
Adam Smith (PhD track - co-advised with S. Skerlos)	06/09-05/11	Assistant Professor, Astani Department of Civil and Environmental Engineering, University of Southern California (Anaerobic membrane bioreactors)
Andrew Colby	07/09-12/10	Civil Engineer IV, Tetra Tech, Pittsburgh, PA (sustainable aquaculture and stress in nitrification systems)
Tara Webster (formerly Clancy) (PhD track – co-advised with K. Hayes)	09/09-12/10	Postdoctoral Associate, Soil and Crop Sciences, Cornell University (Role of sulfate-reducing microbes in biologically mediated removal of arsenic from drinking water)
Jeff Jackson	09/08-05/10	Senior Engineer, Brown and Caldwell, Denver, CO (Biological removal of arsenic and nitrate from drinking water)
Tanna Borrell (co-advised with S. Skerlos)	05/06 – 08/09	Writer, homemaker (use of anaerobic membrane bioreactor for municipal wastewater treatment)

Lynn Williams	09/07-05/09	Brown and Caldwell, Seattle, WA (disinfection of drinking water treated by biofiltration)
Chikako Donahue	09/06-12/08	Stay at home mother
Rohit Warriar	09/07-12/08	Staff Scientist at Geosyntec Consultants, Raleigh, NC
Wangki Yuen	09/07-06/08	PhD Candidate, Dept. of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign (Microbial community characterization of drinking water treatment Systems)
Monisha Brown (PhD track)	09/06 – 12/07	Engineering Associate at Sanitation Districts of Los Angeles County (Sustainable aquaculture)
Tara Jackson	09/05 – 12/07	Chevron, Houston, TX (Quantification of microbial populations in anaerobic membrane bioreactors using a phylogenetic microarray method)
David Berry (PhD track)	09/05 – 05/07	Associate Professor, Dept. of Microbial Ecology, University of Vienna
Gregg Thompson	08/97-12/98	CH2M-Hill, Corvallis, OR
Florencio Ballesteros	08/96-12/97	Instructor, University of the Philippines, Diliman, Quezon City, Philippines
Eric Leveque	08/95-01/97	Carollo Engineers, Las Vegas, NV
Jose Barrios-Perez	08/94-08/96	Ph.D. 2003, Asesor del C. Secretario, Secretaria del Medio Ambiente y Recursos Naturales, México, D.F., Mexico
David Schumacher	08/94-08/96	check
Pavitra Misra	08/93-01/96	NTH Consultants, Lansing, MI
C. Eliana Brown	01/94-01/96	Illinois EPA, Champaign, IL
Jeffrey Ralson	08/93-10/95	O'Brien & Gere Engineers, Inc., Novi, MI
Tetsuo Wada	08/93-08/95	Nihon Suido Consultants Co., Ltd., Tokyo, Japan
Carlos Chavez-Gomez	08/93-05/95	Black & Veach, Phoenix, AZ
Louis le Roux	08/93-12/94	President, BioAir Solutions, LLC, Voorhees, NJ

High School Students Hosted

<i>Name</i>	<i>Work Period</i>	<i>Research Topic</i>	<i>Current Position</i>
Sahithi Pingali	06/17-07/17	Arsenic monitoring in drinking water sources in rural areas in Bangladesh	Student, Stanford Univ.
Jonathan Ni	08/15-07/16	Fate of microplastics in wastewater treatment plants	Student, Univ. of Pennsylvania
Yara El-Tawil	07/14-08/14	Bacteria in drinking water distribution systems and premise plumbing	Student, Univ. of Michigan

Visiting Scholars Hosted

<i>Name (University)</i>	<i>Work Period</i>	<i>Research Topic</i>	<i>Current Position</i>
Caro Truyers (co-advised with I. Smets, KU Leuven)	7/2019-11/2019	Extraction of medium-chain fatty acids produced during anaerobic treatment of waste streams	MS student, KU Leuven, Belgium
Adelaide Nieguitsila (Masuku University of Science and Technology, Gabon)	9/2018-02/2019	Detection of parasites and protozoa in drinking water	Assistant Professor, Masuku University of Science and Technology, Gabon, UMAPS Scholar
Tjok Meuwissen (co-advised with I. Smets, KU Leuven)	7/2018-12/2018	Anaerobic digestion of urban organic waste streams	MS student, KU Leuven, Belgium
Maxim Muermans (co-advised with I. Smets, KU Leuven)	7/2018-10/2018	Extraction of medium-chain fatty acids produced during anaerobic treatment of waste streams	MS student, KU Leuven, Belgium
Gislhain Djessi Tchouty (Masuku University of Science and Technology, Gabon)	10/2017-07/2018	Anaerobic digestion of urban organic waste streams	Masuku University of Science and Technology, Gabon
Nuria Zamorano Lopez (Universitat de Valencia, Spain)	08/2017-02/2018	Microbial community characterization in anaerobic digesters	PhD student, Universitat de Valencia, Spain
Maja Nielsen (Aarhus University, Denmark)	09/16-03/17	Anaerobic digestion	PhD student Aarhus University, Denmark
Julie Fichet (co-advised with I. Smets, KU Leuven)	07/16-10/16	Anaerobic MBR	MS student, KU Leuven, Belgium
Xavier Fonoll Almansa (University of Barcelona)	05/14-04/15	Anaerobic digestion of lignocellulosics	Postdoc University of Michigan

Shilva Shresthra (University of Hawaii)	05/14-12/14	Anaerobic digestion of lignocellulosics	PhD student University of Michigan
Christian Koch (University of Aachen)	04/14-07/14	Treatment of domestic wastewater with anaerobic membrane bioreactors	MS student ETH Zurich
Jinju Geng (Nanjing University)	04/13-04/14	Chromium removal from drinking water	Associate Professor, School of the Environment, Nanjing University, China
S. Udin (AAN, Bangladesh)	02/14	Stability of arsenic solids	Asia Arsenic Network, Bangladesh
A. Shamim Khan (AAN, Bangladesh)	02/14	Stability of arsenic solids	Asia Arsenic Network, Bangladesh
David Miklos (Technical Univ. of Berlin)	05/13-08/13	Stability of arsenic solids	MS student, Technical University of Berlin
Roya Gitiafroz (Univ. of Toronto)	01/07-12/10	Anaerobic benzene degradation	Dept. of Chemical Engineering, Univ. of Akron
Dr. Pranab Ghosh (IIT Guwahati, India)	06/09-06/10	Biologically mediated removal of uranium from drinking water	Assistant Professor, Indian Institute of Technology Guwahati, India
Dermot Hughes (National University of Ireland, Galway, Ireland)	06/08-09/08	Anaerobic membrane bioreactors	Ph.D. Student, NUI
Ebru Dulekgurgen (Istanbul Technical University, Turkey) (co-advised with E. Morgenroth)	02/04-07/04	Granulation in sequencing batch reactors for enhanced biological phosphorus removal	Assistant Professor, Istanbul Technical University, Environmental Engineering Department, Istanbul- Turkey
Ku Yong Kim (KAIST, Korea)	03/04-02/05	Biological hydrogen production	Ph.D. Student, KAIST, Korea
Dr. Mark Fitch (University of Missouri at Rola)	08/03-05/04	Anaerobic membrane bioreactors	Associate Professor, Univ. of Missouri at Rola
N. Amin (Isfahan, Iran) (co-advised with E. Morgenroth)	08/03-01/04	Effect of erythromycin on anaerobic treatment of pharmaceutical wastewater	Ph.D. student, Isfahan, Iran
Dr. Usha George (Tocklai Experimental Station, India)	01/99-06/99	Molecular microbial ecology of anaerobic bioreactors	Tocklai Experimental Station, India
Kaare Hansen (Technical University of Denmark)	08/96-12/96	Oligonucleotide probes for <i>Syntrophomonadaceae</i> to characterize anaerobic bioreactors	Novo Nordisk, Denmark
Dagmar Rothauszky (Technical University of Braunschweig, Germany)	01/96-05/96	Oligonucleotide probes for <i>Microthrix parvicella</i> to characterize foaming in activated sludge	Evotec Corp., Hamburg, Germany
Wolfgang Ritter (Technical University of Munich, Germany)	01/95-08/95	Oligonucleotide probes for mycolic acid containing actinomycetes to characterize foaming in activated sludge	Medical School, Germany

Post-Doctoral Researchers Supervised

Name	Work Period	Research Topic	Placement
Kuang Zhu (co-advised with S. Skerlos), kuangzhu@umich.edu	02/20-12/23	Anaerobic digestion of lignocellulosics and other biomass streams	Assistant Professor, Washington State University
Melina Bautista (co-advised with T. Olson)	09/17-05/21	Optimizing filter operation in an ozone-biofiltration plant to reduce selection for opportunistic pathogens in drinking water production	Carollo Engineer, Sarasota, FL, mbautista@carollo.com
Caroline Van Steendam	09/19-08/20	Characterization and Contamination Testing of Source Separated Organic Feedstocks and Slurries for Co-Digestion at Resource Recovery Facilities	Operations Manager Industrial Wastewater, De Watergroep, Leuven, Belgium

Xavier Fonoll Almansa	01/16-10/19	Anaerobic digestion of lignocellulosics and other biomass streams	Assistant Professor, University of Texas, Austin
Yun Shen	09/16-01/19	Opportunistic bacterial pathogens in drinking water aerosols	Assistant Professor, Department of Civil and Environmental Engineering, George Washington University, yunshen@gwu.edu
Sarah-Jane Haig	10/14-08/18	Linkages between drinking water and human microbiomes	Assistant Professor, University of Pittsburgh, SJHAIG@pitt.edu
Gamze Gulez	05/13-07/13	Linkages between drinking water and human microbiomes	Docent, Wageningen University, The Netherlands, gamzegulez@gmail.com
Ling Cao	01/12 – 07/13	Life cycle assessment (LCA) of aquaculture systems	Associate Professor, School of Oceanography, Shanghai Jiao Tong University, caoling@sjtu.edu.cn
Ameet Pinto	08/09 -06/12	Microbial community analyses of drinking water treatment plants	Associate Professor, Georgia Tech, ameer.pinto@ce.gatech.edu
Giridhar Upahyaya	09/10 -08/12	Microbiologically mediated removal of multiple contaminants from drinking water	Water and Reuse Process Leader, Brown & Caldwell, Orange County, CA, giridharu5@gmail.com
Wendell Khunjar (co-advised with N. Love)	12/09 -09/10	Structural Diversity and Functional Resilience to Stress in Ammonia Oxidizers	Research Engineer, Hazen and Sawyer P.C., Fairfax, VA, wkhunjar@hazenandsawyer.com
Diane Holder	12/05 -01/09	Biofilms in drinking water distribution systems	Researcher USDA
Aurelio Briones	06/02-12/08	Anaerobic biological treatment of high sulfate waste streams – microbial ecology of rice paddies – Sustainable aquaculture	Assistant Professor, University of Idaho
Chuanwu Xi	01/01-08/04	Use of molecular beacons in microfluidic devices – biological perchlorate removal from drinking water	Professor, University of Michigan, cxi@umich.edu
Jennifer Crawford Simmons	01/97-01/04	Herbicide fate in anaerobic soils – Biological hydrogen production	Teacher, Champaign, IL,
Largus Angenent	08/98-12/00	Biological treatment of animal waste	Humboldt Professor, University of Tübingen, Germany, l.angenent@uni-tuebingen.de
Krassimira Hristova	1/98-12/99	Development of solution based hybridization techniques	Associate Professor, Marquette University, Milwaukee, WI, krassimira.hristova@marquette.edu
Margit Mau	11/97-06/99	Development of solution based hybridization techniques	Assistant Professor, Bergakademie Freiberg, Germany
Elizabeth Wheeler-Alm	08/94-06/96	Molecular microbial ecology in soil environments	Professor, Central Michigan University, alm1ew@cmich.edu

M.S. Students Supervised at Present

<i>Name</i>	<i>Work Period</i>	<i>Research Topic</i>
Yining Sun, yyiningg@umich.edu	01/24-present	Mitigation strategies for nontuberculous bacteria in drinking water systems
Xinran Zhang, zxinran@umich.edu	09/23-present	Medium-chain fatty acid production during anaerobic treatment of waste streams

Ph.D. Students Supervised at Present

<i>Name</i>	<i>Work Period</i>	<i>Research Topic</i>
Katherine Giammalvo (co-advised with S. Skerlos), kgiamm@umich.edu	08/2023-present	Biomembrane filtration process for nitrogen removal from wastewater
Soojung Lee, Isoojung@umich.edu	08/2023-present	Mitigation strategies for nontuberculous bacteria in drinking water systems
Renisha Karki, (co-advised with S. Skerlos) renisha@umich.edu	08/2021-present	Anaerobic dynamic membrane bioreactors
Nuha Alfahham (co-advised with K. Wigginton), anuha@umich.edu	07/2021-present	Novel disinfection strategies for drinking water systems
Hang "Alex" Song (co-advised with S. Skerlos), hangsong@umich.edu	06/2021-present	Biomembrane filtration process for nitrogen removal from wastewater
Renata Starostka (co-advised with S. Skerlos), renatas@umich.edu	06/2021-present	Modeling of anaerobic digestion systems
Pedro Puente (co-advised with S. Skerlos), puentepe@umich.edu	01/20 -present	Characterization and Contamination Testing of Source Separated Organic Feedstocks and Slurries for Co-Digestion at Resource Recovery Facilities
Dianna Kitt, dkitt@umich.edu	08/19 -present	Medium-chain fatty acid production during anaerobic treatment of waste streams

Post-Doctoral Researchers Supervised at Present

<i>Name</i>	<i>Work Period</i>	<i>Research Topic</i>
Narasimman Lakshminarasimman (co-advised with S. Skerlos)	07/24-present	Anaerobic digestion in two-phase dynamic membrane bioreactor system
Nazmiye Cemre Birben (co-advised with A. Szczuka), nbirben@umich.edu	06/24-present	Emerging contaminants in drinking water treatment
Sarah Potgieter, spotgiet@umich.edu	07/19-present	Monitoring of opportunistic pathogens in drinking water systems

Research Laboratory Specialist/Educational Specialist

<i>Name (University)</i>	<i>Work Period</i>	<i>Research Topic</i>
Tim Fairley-Wax (co-advised with S. Skerlos), timfair@umich.edu	01/18-present	Anaerobic dynamic membrane bioreactors for waste treatment
Ilka Rodriguez-Calero (co-advised with S. Skerlos), irodri@umich.edu	07/22-present	Education Program Design, Waste-to-Energy

Visiting Scholars Hosted at Present

<i>Name (University)</i>	<i>Work Period</i>	<i>Research Topic</i>
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Ph.D. Committees – University of Michigan (dissertation advisors listed in parentheses)

Xu Li, Preliminary and Final Exams (Raskin), Dec. 05, June 08 chair.
Lisa Colosi, Preliminary and Final Exams (Weber), March 06, July 07 member.
David Keeney, Qualifying Exam (Semrau), May 06, member.
Thi Hoa Trinh, Qualifying Exam (Adriaens/Lastoskie), May 06, Sept. 06, member.
Sharon Gourdji, Qualifying Exam (Michalak), Jan. 07, member.

David Berry, Qualifying, Preliminary, and Final Exams (Raskin/Xi), Jan. 07, Nov. 07, July 09 chair.

Tanna Borrell, Qualifying Exam (Raskin/Skerlos), May 07, co-chair.

Trinh Tran, Qualifying Exam (Lastoskie), May 07, member.

Giridhar Upadhyaya, Qualifying, Preliminary, and Final Exams (Raskin/Hayes), June 07, Sept. 08, Sept. 10 co-chair.

Tara Jackson, Qualifying Exam (Raskin), Sept. 07, chair.

Abhishek Chatterjee, Qualifying Exam (Michalak), January 08, member.

Monisha Brown, Qualifying, Preliminary, and Final Exams (Raskin), May 08, June 10, May 13 chair.

Jongdae Im, Qualifying Exam (Semrau), May 08, member.

Meghan Milbrath (SPH), Preliminary Exam (Joliet), May 08, member.

Dongjuan Dai (SPH) Preliminary and Final Exams (Xi/Raskin), Aug. 08, Sept. 10, co-chair.

Yu Chen (Chemical Engineering) Preliminary and Final Exams (Lin), Jan. 09, Sept. 12, member.

Jeremy Guest, Qualifying, Preliminary, and Final Exams (Love/Skerlos), Jan. 09, Dec. 09, Dec. 11, member.

Sherri Cook, Qualifying, Preliminary, and Final Exams (Love/Skerlose), May 10, Jan. 12, May 14, member.

Daniel Obenour, Qualifying Exam (Michalak/Scavia), Jan. 10, member.

Tara Clancy, Qualifying Exam (Raskin/Hayes), May 11, Preliminary Exam, May 12, Final Exam, Jan 15, co-chair.

Adam Smith, Qualifying, Preliminary, and Final Exams (Raskin/Skerlos), May 11, May 12, Aug 14, co-chair.

Xunchang Fei, Qualifying Exam (Zekkos/Raskin), June 11, Preliminary and Final Exams (Zekkos/Raskin), Sept. 11, Dec. 15, co-chair.

Lauren Stadler, Qualifying, Preliminary, and Final Exams (Love), May 12, June 13, December 15 member.

Jeseth Delgado Vela, Qualifying Exam (Love), May 13, member

Nadine Kotlarz, Qualifying Exam (Raskin), May 13, Preliminary Exam (Raskin), Jan. 14, Final Exam (co-chair), May 17

Ivan Jayawan, Qualifying Exam (Demond/Ellis), Jan 14, Feb 14, member.

Chia-Chen Wu, Qualifying Exam (Olson/Love), July 14, member.

Wenjia Fen, Qualifying Exam (Ellis), Sept 14, member.

Yinyin Ye, Qualifying Exam (Wigginton), Nov 14, member.

Mohit Nahata (Chemical Engineering), Preliminary and Final Exams (Schwank), April 14, April 18, member.

Caroline Van Steendam, Qualifying Exam (Raskin/Skerlos), April 14, Preliminary Exam (Raskin/Skerlos), August 16, co-chair.

Joy Jeyaratnam, Qualifying Exam (Wigginton), Sept 15, member.

Nicole Rockey, Preliminary Exam (Raskin/Wigginton), May 16, co-chair.

Emily Crossette, Preliminary Exam (Raskin/Wigginton), May 16, co-chair.

Raghav Reddy, Preliminary Exam (Raskin), May 16, chair.

Jubilee Adeoye, Preliminary Exam (Ellis), May 16, member.

Sara Troutman, Preliminary Exam (Kerkez/Love), May 16, member.

Shilva Shrestha, Preliminary Exam (Raskin), April 17, chair; Proposal defense exam (Raskin), March 18, chair.

Katherine Dowdell, Preliminary Exam (Raskin), May 18, Proposal Defense Exam, Jan. 20, co-chair.

Avery Carlson, Preliminary Exam (Daigger/Love), May 18, member.

Enrique Rodriguez, Preliminary Exam (Wigginton/Love), May 19, member.

Hollie Adejumo, Preliminary Exam (Love), May 19, member.

Kathryn Langenfeld (chair, Wigginton), Proposal Defense Exam, Dec. 19, Final exam, Dec. 21 member.

Dianna Kitt, Preliminary Exam, Proposal Defense Exam (Raskin), May 20, Oct 22, chair.

Pedro Puente, Preliminary Exam (Raskin), May 20, chair.

Ernesto Martinez, Preliminary Exam (Kerkez/Wigginton), May 20, Proposal Defense Exam, April 22, member.

Hang (Alex) Song, Preliminary Exam (Raskin/Skerlos), May 21, co-chair.

Nuha Alfahham, Preliminary Exam (Raskin), May 22, chair.

Renisha Karki, Preliminary Exam (Raskin/Skerlos), Jan 23, co-chair.

Renata Starostka, Preliminary Exam (Raskin/Skerlos), Jan 23, co-chair

Delaney Snead, Preliminary Exam (Wigginton), May 23

Jessica Li, Preliminary Exam (Lin), Fall 2023

Yanmeng Liu, Preliminary Exam (Lin), Fall 2023

Kate Giammalvo, Preliminary Exam (Raskin/Skerlos), May 24, co-chair.

Soojung Lee, Preliminary Exam (Raskin), May 24, chair.

Zhenyu Xia, Preliminary Exam (Szczuka), May 24, member

Ph.D. Committees – University of Illinois at Urbana-Champaign

Cunyet Feizoulof, Qualifying Exam (Snoeyink), Aug. 93, member.
Daniel Noguera, Preliminary and Final Exams (Freedman), Nov. 93, Nov. 95, member.
Matthew Verce, Qualifying and Preliminary Exams (Freedman), Aug. 94, July 96, member.
Thomas Gillogly, Qualifying Exam (Snoeyink), Aug. 94, Jan. 95, member.
Eric Seagren, Final Exam (Rittmann), March 94, member.
Syed Hashsham, Preliminary and Final Exams (Freedman), Jan. 95, Sept. 96, member.
Dandan Zheng, Qualifying, Preliminary, and Final Exams (Raskin), Aug. 95, Nov. 97, March 99, chair.
Francis de los Reyes, Qualifying, Preliminary, and Final Exams (Raskin), Aug. 95, May 98, Nov. 99, chair.
Hari Viswanathan, Qualifying Exam (Valocchi), Aug. 95, member.
Robert Brent, Qualifying Exam (Herricks), Jan. 96, member.
Sunji Oya, Preliminary and Final Exams (Valocchi), Nov. 96, March 98, member.
Mary Jo Kirisits, Qualifying, Preliminary, and Final Exams (Snoeyink), Jan. 97, 98, May 00, member.
Daniel Oerther, Qualifying, Preliminary, and Final Exams (Raskin), Aug. 97, May 99, April 01, chair.
Jason Rennecker, Qualifying Exam (Marinas), Aug. 97, Jan. 98, member.
Michelle Corley, Preliminary Exam, Dept. of Animal Sciences (Mackie/White), Aug. 97, Nov. 97, member.
Joe Elarde, Qualifying Exam (Snoeyink/Marinas), Jan. 98, member.
Qilin Li, Qualifying, Preliminary, and Final Exams (Snoeyink), Jan. 99, Dec. 00, July 02, member.
Jess Brown, Qualifying, Preliminary, and Final Exams (Snoeyink/Raskin), Jan. 99, Sept. 00, Jan. 02, co-chair.
Darren Lytle, Qualifying Exam (Snoeyink), Jan. 99, member.
Benito Corona-Vasquez, Qualifying Exam (Marinas), Aug. 99, member.
Jae Hong Kim, Qualifying Exam (Marinas), Aug. 99, member.
Dominic Frigon, Qualifying, Preliminary, and Final Exams (Raskin), Jan. 00, Aug. 01, Dec. 04, chair.
Bo Zhang, Qualifying Exam (Raskin), Jan. 01, chair.
Kyung Moon, Qualifying Exam (Sanford), Jan. 01, member.
Young-Chul Choi, Qualifying Exam, Sept. 01, Jan. 02, Preliminary Exam, Jan. 05, and Final Exam, Oct. 05 (Morgenroth/Raskin), co-chair.
Quian He, Qualifying, Preliminary, and Final Exams (Sanford), Sept. 01, Aug. 02, July 03 member.
Roderick Agbisit, Preliminary Exam (Rausch), July 02, member.
Sudini Padmasiri, Qualifying, Prelim, and Final Exams (Raskin/Morgenroth), Sept. 03, Nov. 05, Sept. 07 chair.
Toshio Shimada-Beltran, Qual, Prelim, and Final Exams (Raskin/Zilles), Sept. 03, Sept. 05, May 07 chair.
Zhi Zhou, Qualifying, Preliminary, and Final Exams (Zilles/Raskin), Sept. 03, Oct. 05, May 07 co-chair.
Ning Tong, Qualifying Exam (Raskin), Jan. 04, chair.
Jiangzhao Zhang, Qualifying Exam (Morgenroth/Raskin), Jan. 04, co-chair.
Adrienne Minetti, Qualifying Exam (Morgenroth/Clark), Jan. 04, member.
Kim Milferstedt, Qualifying Exam (Morgenroth), Jan. 04, member.
Xu Li, Qualifying Exam (Raskin/Morgenroth), Sept. 04, chair.
Martin Page, Qualifying Exam (Marinas), Jan. 05, member.

Other Contributions to Instructional Programs

Supervised research projects of several Civil and Environmental Engineering undergraduate students: Mike Mangini (Fall 93), Mark Mirek (Spring 94), Dave Schumacher (Fall 94), James Danalewich (Spring 95+Fall 95), Bradley Grens (Spring 95), Darci Black (Fall 95), Quiana Whittler (Fall 95+Spring 96), Mitch Mathews (Spring 96), Paul Ruscko (Spring 97, Fall 97, Spring 98), Heidi Mulderink (Fall 96, Spring 97), Sarah Keenan (Spring 98, Summer 98), Vicki Swidron (Summer 98, Fall 98), Martin Tower (Fall 98, Spring 99); Jeff Grubich (Fall 99, Spring 00); Yasuhiro Usui (Fall 99, Spring 00), Tim Grimm (Fall 00), Abigail Van Waning (Spring 01), Chad Gladfelter (Spring 02, Summer 02), Ka Wai Suzanne Huang (Spring 02, Summer 02), Wangki Yuen (Winter 07, Spring 07), Khadeejah Sani (Winter 07), Heather Dorer (Fall 09, Winter 10, Sp/Su 10, Fall 10, Winter 11), Andrea Trese (Sp/Su 10, Sp/Su 11), Zijia Li (Sp/Su 10, Fall 10, Winter 11), Maria Sevillano Rivera (Sp/Su 10), Lauren Strahs (Fall 10, Winter 11, Fall 11, Winter 12), Kathryn Vanderweele (Winter 11, Sp/Su 11 (SURE), Fall 11, Winter 12), Christina Machak (Sp/Su 11, Fall 11; dual degree Geology/Civil Engineering); Xinsheng Chu (Sp/Su 11, Fall 11), Amy Wells (Fall 12), Julia Pierce (Fall 12, Winter 13, Sp/Su 13, Fall 13), Sarah Halperin (Fall 12, Winter 13), James Tan (Sp/Su 13 (UROP), Sp/Su 14 (SURE), Fall 14, Winter 15, Fall 15, Winter 16), James Yonts (Winter 14, Sp/Su 14 (SURE), Fall

14, Winter 15, Sp/Su 15 (SURE)), Susan Rusinowski (Fall 14), Bridget Vial (Fall 15, Winter 16, Fall 16, Winter 17), Margaret Houlihan (Winter 16, UROP), Alec Distel (Winter 17, Sp/Su 17 (UM Energy Institute-UROP)), Juliana Huizenga (Winter 17, Sp/Su 17 (SURE), Fall 17, Winter 18, Fall 18, Winter 19), Lindsay Rasmussen (Winter 17, Sp/Su 17 (WISE RP Summer Research Award), Fall 17), Liem Ellen Setiawan (Sp/Su 17 (SURE), Fall 17, Winter 18, Fall 18, Winter 19), Meghna Prasad (Winter 18, Sp/Su 18), Lucy Aley (Sp/Su 18 (SURE), Fall 18, Winter 19, Sp/Su 19 (UM Energy Institute-UROP)), Michael Mata (Sp/Su 18), Lindsey Hayter (Fall 18, Winter 19), Rohan Chandran (Winter 19, Sp/Su 19), Willa Tobin (Sp/Su (SURE) 2020, add other SURE students for Sp/Sy 2020, Victor Luk (Sp/Su 21, Fall 21, Winter 22), Evan Zalek (Sp/Su 23, Fall 23, Winter 24), Jenna Kutscher (Sp/Su 23, Fall 23, Winter 24),

Supervised research projects of two Microbiology undergraduate students, Jennifer Daley (Spring 97), Andrew White (Summer 2004, Fall 2005, Spring 2005), five Chemical Engineering undergraduate students, Davina Carson (Spring 97), Jarad Champion (Spring 01, Fall 01, Spring 02), Jennifer Drummon (Summer 02), Tara Jackson (Summer 04), Qaboos Imran (Fall 12, Winter 13, Sp/Su 13, Fall 13, Winter 14, Sp/Su 14, Fall 14), a Biochemistry undergraduate student, Matt Wagoner (Summer 02, Fall 02, Spring 03, Summer 03, Fall 03, Spring 04), a Molecular Biology undergraduate student, Mike Tenuto (Spring 05), an Agricultural Engineering undergraduate student, Richard Hussey (Summer 97, Fall 97, Spring 98), and two Chemistry undergraduate student, Adrianna Ivory (Fall 12, Winter 13). Guy Burke (Winter 16, Summer 16, Fall 16), Chemical Engineering student, Mahek Siwatch maheks@umich.edu (Fall 22, Winter 23), Biochemistry and Informatics student, Kat Mudge (Winer 23, Fall 23, Winter 24)

PUBLICATIONS

Book/Book Chapters

1. Hofman-Bang, J., D. Zheng, P. Westermann, B.K. Ahring, L. Raskin (2003), Molecular Ecology of Anaerobic Reactor Systems, B. K. Ahring (Ed.), Biomethanation, Advances in Biochemical Engineering/Biotechnology, Springer-Verlag, Inc., 81: 151-203.
2. Zhang, B., B. Marinas, L. Raskin (2003), Use of Molecular Probes to Study Biofilms, P. Lens, A.P. Moran, T. Mahony, P. Stoodley, V. O'Flaherty (Eds.), Biofilms in Medicine, Industry and Environmental Biotechnology, IWA Publishing, pp. 352-374.
3. Zheng, D., and L. Raskin (2002), Anaerobic Granules and Granulation Processes, G. Bitton (Ed.), Encyclopedia of Environmental Microbiology, John Wiley & Sons, Inc., New York.
4. Fry, N.K., L. Raskin, R. Sharp, E.W. Alm, B. Mobarri, D.A. Stahl (1997), In Situ Analysis of Microbial Populations with Molecular Probes: The Phylogenetic Dimension, J. Shapiro and M. Dworkin (Eds.), Bacteria as Multicellular Organisms, Oxford University Press.
5. Raskin, L., W.C. Capman, R. Sharp, L.K. Poulsen, and D.A. Stahl (1997), Molecular Ecology of Gastrointestinal Ecosystems, R.I. Mackie, B.A. White, and R.E. Isaacson (Eds.), *Ecology and Physiology of Gastrointestinal Microbes, Volume 2: Gastrointestinal Microbiology and Host Interactions*, Chapman and Hall, pp. 243-298.
6. Stahl, D.A., R.I. Amann, L.K. Poulsen, L. Raskin, and W.C. Capman (1995), The use of Fluorescent Probes for Determinative Microscopy, F.T. Robb, K.R. Sowers, S. DasSarma, A.R. Place, H.J. Schreier, and E.M. Fleischmann (Eds.), *Archaea: A laboratory manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, pp. 111-121.
7. Rittmann, B.E., E.A. Seagren, B.A. Wrenn, A.J. Valocchi, C. Ray, and L. Raskin (1994), *In Situ Bioremediation*, 2nd Ed., Noyes Publications, Park Ridge, NJ, pp. 260.

Journal Articles, see also [Google Scholar Profile](#)

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1. Shrestha, S., Abdullah, M., Raskin, L., Skerlos, S. Environmental life cycle assessment of caproic acid recovery from brewery waste streams. To be submitted to *Green Chemistry*.
2. Zhu, K., Zhang, W., Jafarov, E., Satish, K. Solander, K., Urgun Demirtas, M., Skerlos, S., Raskin, L., Open-source anaerobic digestion modeling platform, Anaerobic Digestion Model No. 1 Fast (ADM1F). Submitted to *Biotechnology and Bioengineering*
3. Dowdell, K. S., Potgieter, S. C., Olsen, K., Lee, S., Vedrin, M., Caverly, L. J., John J LiPuma, Raskin, L. (2024). Source-to-tap investigation of the occurrence of nontuberculous mycobacteria in a full-scale chloraminated drinking water system. *Applied and Environmental Microbiology*, e00609-24.
4. Dowdell, K. S., Olsen, K., Paz, E. F. M., Sun, A., Keown, J., Lahr, R., B Steglitz, A Busch, JJ LiPuma, T.M. Olson, Raskin, L. (2024). Investigating the suitability of online flow cytometry for monitoring full-scale drinking water ozone system disinfection effectiveness. *Water Research*, 257, 121702.
5. Boehm, A. B., Raskin, L., Alvarez, P., & Hong, P. Y. (2024). Maximizing the Impact of Research Featuring Nucleic-Acid Sequencing Methods in Environmental Science & Technology and Environmental Science & Technology Letters. *Environmental Science & Technology*, 58(19), 8115-8116.
6. Paz, E. F. M., Raskin, L., Wigginton, K. R., Kerkez, B. (2024). Toward the autonomous flushing of building plumbing: Characterizing oxidation-reduction potential and temperature sensor dynamics. *Water Research*, 251, 121098.
7. Fonoll, X., Zhu, K., Aley, L., Shrestha, S., Raskin, L. (2024), Simulating Rumen Conditions using an Anaerobic Dynamic Membrane Bioreactor to Enhance Hydrolysis of Lignocellulosic Biomass. *Environ. Sci. Technol.* 58 (3), 1741-1751. <https://doi.org/10.1021/acs.est.3c06478>, also available as a preprint from bioRxiv, 21 Feb 2023, <https://doi.org/10.1101/2023.02.20.529314>

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8. Qin, Y., Wu, L., Zhang, Q., Wen, C., Van Nostrand, J. D., Ning, D., Raskin, L., Pinto, A., Zhou, J. (2023). Effects of error, chimera, bias, and GC content on the accuracy of amplicon sequencing. *Msystems*, 8(6), e01025-23.

9. Dowdell, K. S.; Healy, H. G.; Joshi, S.; Grimard-Conea, M.; Pitell, S.; Song, Y.; Ley, C.; Kennedy, L. C.; Vosloo, S.; Huo, L.; Haig, S.-J.; Hamilton, K. A.; Nelson, K. L.; Pinto, A.; Prévost, M.; Proctor, C. R.; Raskin, L.; Whelton, A. J.; Garner, E.; Pieper, K. J.; Rhoads, W. J. (2023), *Legionella pneumophila* Occurrence in Reduced-Occupancy Buildings in 11 Cities during the COVID-19 Pandemic. *Environ. Sci.: Water Res. Technol.*, 10.1039.D3EW00278K. <https://doi.org/10.1039/D3EW00278K>
10. Fonoll Almansa, X., R. Starostka, L. Raskin, G. Zeeman, F. De Los Reyes, III, J. Waechter, D. Yeh, T. Radu (2023), Anaerobic Digestion as a Core Technology in Addressing the Global Sanitation Crisis: Challenges and Opportunities. *Environmental Science and Technology*, 57, 19078–19087. <https://doi.org/10.1021/acs.est.3c05291>
11. Wu, Z., Nguyen, D., Shrestha, S., Raskin, L., Khanal, S. K., & Lee, P. H. (2023). Evaluation of Anaerobic Digestion as a Mechanism to Explain Surplus Methane Production in Animal Rumina and Engineered Digesters. *Environmental Science & Technology*, 57(33), 12302-12314..
12. Nyitrai, J., X. Fonoll, K. Zhu, S. Banerjee, T. R. Hawkins, M. Urgan-Demirtas, L. Raskin, S. Skerlos (2023). Life cycle assessment on a novel dynamic membrane two-phase bioreactor for the co-digestion of food waste and sewage sludge. *Water Research*, 240, 120078. <https://doi.org/10.1016/j.watres.2023.120078>
13. Reddy, R.R., G. A. van Velden, Md. J. Abedin, Md. R. Karim, K. F. Hayes, A. Agrawal, L. Raskin (2023), Low-cost informational intervention reduced drinking water arsenic exposure in Bangladesh, *PNAS Nexus*, 2(3), pgac284.
14. Fonoll, X., Zhu, K., Aley, L., Shrestha, S., Raskin, L. (2023) Simulating rumen conditions using an anaerobic dynamic membrane bioreactor to enhance hydrolysis of lignocellulosic biomass. *bioRxiv*.
15. Shrestha, S., Xue, S., Raskin, L. (2023) Competitive reactions during ethanol chain elongation were temporarily suppressed by increasing hydrogen partial pressure through methanogenesis inhibition. *Environmental Science & Technology*. 57(8), 3369–3379 <https://doi.org/10.1021/acs.est.2c09014>

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16. Shen, Y., Haig, S. J., Prussin, A. J., LiPuma, J. J., Marr, L. C., & Raskin, L. (2022). Shower water contributes viable nontuberculous mycobacteria to indoor air. *PNAS Nexus*, 1(5), pgac145.
17. Hegarty, B., Dai, Z., Raskin, L., Pinto, A., Wigginton, K., & Duhaime, M. (2022). A Snapshot of the Global Drinking Water Virome: Diversity and Metabolic Potential Vary with Residual Disinfectant Use. *Water Research*, 118484.
18. Jin, L., Pruden, A., Boehm, A. B., Alvarez, P. J., Raskin, L., Kohn, T., & Li, X. (2022). Integrating Environmental Dimensions of “One Health” to Combat Antimicrobial Resistance: Essential Research Needs. *Environmental Science & Technology*.
19. Fairley-Wax, T., Raskin, L., & Skerlos, S. J. (2022). Recirculating Anaerobic Dynamic Membrane Bioreactor Treatment of Municipal Wastewater. *ACS ES&T Engineering*.
20. Proctor, C., Garner, E., Hamilton, K. A., Ashbolt, N. J., Caverly, L. J., Falkinham III, J. O., Haas, C.N., Prevost, M., Prevost, D.R., Pruden, A., Raskin, L., Stout, J., and Haig, S. J. (2022). Tenets of a holistic approach to drinking water-associated pathogen research, management, and communication. *Water Research*, 211, 117997.
21. Dowdell, K. S., Greenwald, H. D., Joshi, S., Grimard-Conea, M., Pitell, S., Song, Y., Ley, C., Kennedy, L.C., Vosloo, S., Huo, L., Haig, S.-J., Hamilton, K.A., Nelson, K., Pinto, A.J. Michele Prevost, Caitlin R Proctor, Lutgarde Raskin, Andrew J Whelton, Emily Garner, Kelsey J Pieper, & Rhoads, W. J. (2022). *Legionella pneumophila* occurrence in reduced-occupancy buildings in 11 cities during the COVID-19 pandemic. *medRxiv*. 2022.06. 28.22277022
22. Shrestha, S., Colcord, B., Fonoll, X., & Raskin, L. (2022). Fate of influent microbial populations during medium chain carboxylic acid recovery from brewery and pre-fermented food waste streams. *Environmental Science: Water Research & Technology*. 8 (2), 257-269
23. Karki, R., Chuenchart, W., Surendra, K. C., Sung, S., Raskin, L., and Khanal, S. K. (2022). Anaerobic co-digestion of various organic wastes: Kinetic modeling and synergistic impact evaluation. *Bioresource Technology*, 343, 126063.

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24. Martinez Paz, E. F., Tobias, M., Escobar, E., Raskin, L., Roberts, E. F., Wigginton, K. R., & Kerkez, B. (2021). Wireless Sensors for Measuring Drinking Water Quality in Building Plumbing: Deployments and Insights from Continuous and Intermittent Water Supply Systems. *ACS ES&T Engineering*.

25. Crossette, E., Gumm, J., Langenfeld, K., Raskin, L., Duhaime, M., & Wigginton, K. (2021). Erratum for Crossette et al., "Metagenomic Quantification of Genes with Internal Standards". *Mbio*, 12(3), e01174-21.
26. Karki, R., Chuenchart, W., Surendra, K. C., Shrestha, S., Raskin, L., Sung, S., Hashimoto, A. & Khanal, S. K. (2021). Anaerobic co-digestion: Current status and perspectives. *Bioresource Technology*, Volume 330, 125001. <https://doi.org/10.1016/j.biortech.2021.125001>
27. Schueler, J., Lansing, S., Crossette, E., Naas, K., Hurt, J., Raskin, L., Wigginton, K., Aga, D. (2021), Tetracycline, sulfadimethoxine, and antibiotic resistance gene dynamics during anaerobic digestion of dairy manure. *Journal of Environmental Quality*, <https://doi.org/10.1002/jeq2.20211>
28. Wu, Z., Nguyen, D., Lam, T.Y., Zhuang, H., Shrestha, S., Raskin, L., Khanal, S.K. and Lee, P.H., 2020. Synergistic association between cytochrome bd-encoded Proteiniphilum and reactive oxygen species (ROS)-scavenging methanogens in microaerobic-anaerobic digestion of lignocellulosic biomass. *Water Research*, 190, p.116721.
29. Rockey, N. C., J. B. Henderson, K. Chin, L. Raskin, K.R. Wigginton (2021), Predictive modeling of virus inactivation by UV. *Environmental Science & Technology* 55, 5, 3322-3332. DOI: 10.1021/acs.est.0c07814 (Rockey, N. C., K. Chin, J. B. Henderson, L. Raskin, K.R. Wigginton (2020), Predictive modeling of virus inactivation by UV. bioRxiv, doi: <https://doi.org/10.1101/2020.10.27.355479>.)
30. Crossette E, Gumm J, Langenfeld K, Raskin L, Duhaime M, Wigginton K. (2021) Metagenomic Quantification of Genes with Internal Standards. *mBio*. Feb 23;12(1).
31. Fonoll X, Shrestha S, Khanal SK, Dosta J, Mata-Alvarez J, Raskin L. Understanding the Anaerobic Digestibility of Lignocellulosic Substrates Using Rumen Content as a Cosubstrate and an Inoculum. *ACS ES&T Engineering*. 2021 Jan 31.
32. Wigginton KR, Arts PJ, Clack HL, Fitzsimmons WJ, Gamba M, Harrison KR, LeBar W, Luring AS, Li L, Roberts WW, Rockey NC. Validation of N95 filtering facepiece respirator decontamination methods available at a large university hospital. *Open forum infectious diseases* 2021 Feb, Vol. 8, No. 2, p. ofaa610. US: Oxford University Press. (Wigginton, K.R., Arts, P.J., Clack, H., Fitzsimmons, W.J., Gamba, M., Harrison, K.R., LeBar, W., Luring, A.S., Li, L., Roberts, W.W. and Rockey, N., Jania Torreblanca, Carol Young, Loïc C. Anderegg, Amy Cohn, John M. Doyle, Cole O. Meisenhelder, L. Raskin, N. G. Love, Keith S. Kaye, 2020. Validation of N95 filtering facepiece respirator decontamination methods available at a large university hospital. *medRxiv*.)
33. Shrestha, S., Xue, S., Kitt, D., Song, H., Truysers, C., Muermans, M., Smets, I., Raskin, L. (2021). Anaerobic, Dynamic Membrane Bioreactor Development to Facilitate Organic Waste Conversion to Medium-Chain Carboxylic Acids and Their Downstream Recovery. *ACS ES&T Engineering* doi:10.1021/acsestengg.1c00273
34. Rockey, N., Y. Shen, S.-J. Haig, M. Wax, J. Yonts, K. Wigginton, L. Raskin, Olson, T. M. (2021), Impact of service line replacement on lead, cadmium, and other drinking water quality parameters in Flint, Michigan, *Environmental Science: Water Research & Technology* <https://doi.org/10.1039/D0EW00975J>

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In preparation:

1. Kotlarz, N. S.J. Haig, E. Hughes, K.J. Flynn, J.J. LiPuma, M. Swanson, and L. Raskin, Mycobacteria in Chloraminated Drinking Water Systems, Review.
2. Yun Shen, Sarah J. Haig, Chrissy Cabay, Bill Van Bonn, and Lutgarde Raskin. Quantification and Identification of Mycobacterium Species in an Exhibit in Shedd Aquarium: the Link between Water, Air, and Animal Infection.
3. Dowdell, KS, H Song, M Gabrielli, S Lee, KG Olsen, S Potgieter, M Vedrin, A Pinto, V Delafont, L Raskin. "Free-living amoebae diversity through drinking water treatment and distribution."
4. Bautista-de los Santos, QM, KS Dowdell, M Prasad, J Huizenga, L Rasmussen, L Sanford, B Steglitz, S Page, TM Olson, L Raskin. "Factors shaping microbial community assembly and performance of acclimated full-scale drinking water ozone-biofilters."
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6. Potgieter, S., Vosloo, S., Dowdell, K., Vedrin, M., Page, S., Pinto, A & Raskin, L. "Spatial- temporal dynamics of drinking water nitrifier populations from biofiltration through distribution." To be submitted to mShpere.
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9. Zhu, K., Fairley-Wax, T., Fonoll, X. Puente, P., Karki, R., Starostka, R., Skerlos, S., Raskin, L., Model informed optimization of a novel two-phase anaerobic dynamic membrane bioreactor system for high-rate biogas production
10. Song, H., Skerlos, S., Raskin, L., A Perspective on Protozoa in Water Treatment Processes: Occurrence, Ecological Importance and Engineering Applications.
11. Shrestha, S., Abdullah, M., Raskin, L., Skerlos, S. Environmental life cycle assessment of caproic acid recovery from brewery waste streams. To be submitted to Green Chemistry.
12. Karki, R., Khanal, S.K., Skerlos, S., Raskin, L., 2024. A long-term evaluation of anaerobic digestion using coffee pulp and cattle manure feedstocks on performance and microbial communities. In preparation.
13. Khadir, A., Nakhla, G., Muller, C., Karki, R., Raskin, L., Skerlos, S., Bronstead, E., 2024. Micro-aeration for hydrogen sulfide reduction in full-scale anaerobic digesters with limited headspace. In preparation.

Abstracts and Papers in Conference Proceedings

2024

1. Potgieter, S., Lahr, B., Lee, S., Alfahham, N., Quoneibi, L., Sandoval, S., Guo, Y, Steglitz, B., Raskin, L. (2024) Impact of low-dose UV treatment on microbial communities in a full-scale drinking water distribution system. Water Quality and Technology Conference (WQTC), November 2024
2. Alfahham, N. WQTC
3. Potgieter, S. ISME
4. Kitt, D., Zhang, X., Speer, D., Shrestha, S., Tuteja, A., Raskin, L., Acid Whey Chain Elongation using Anaerobic Dynamic Membrane Bioreactor and Continuous Liquid-Liquid Extraction and In-situ Membrane Separation Technologies, submitted for oral presentation, International Water Association 18th World Congress on Anaerobic Digestion, Istanbul, Turkey, June 2-6, 2024.

5. Zhu, K., Fairley-Wax, T., Karki R., Starostka, R., Puente, P., Guo, Y., Skerlos, S., Raskin, L. Model-derived insights into a two-phase anaerobic dynamic membrane bioreactor system for efficient co-digestion of food waste and sewage sludge. *Submitted for Oral Presentation at IWA 18th IWA World Conference on Anaerobic Digestion, Istanbul, Turkey, 2024.*
6. Zhang, X. Midwest Microbial Ecology Conference
7. Lippert, T., H. Nielsen, Y. Lin, K. Zhu, S. Skerlos, L. Raskin, G. Wells (2024), Symposium on Biotechnology for Fuels and Chemicals (SBFC) in Alexandria, VA, April 28 – May 1
8. Zhu, K. et al. WRRMod
9. Zhu, K., Fairley-Wax, T., Puente, P., Karki, R., Starostka, S., Guo, Y., Skerlos, S., Raskin, L. (2024) High-rate hydrolysis of food waste and sludge, MWEA Biosolids Conference, Pontiac, MI, March 6-7.

2023

10. Bautista, M., K. Dowdell, M. Prasad, L. Rasmussen, J. Huizenga, L. Sanford, B. Steglitz, S. Page, T. Olson and L. Raskin (2023), Factors shaping the microbial communities of full-scale biofilters for drinking water production (WRF 4743), Potable Reuse and Biological Treatment Symposium, Salt Lake City, UT, July 24-26
11. Kitt, D., Song, H., Shrestha, S., Raskin, L. Advancing Anaerobic Biotechnologies for Platform Chemical Recovery from Acid Whey Dairy Waste. Poster Presentation at 2023 AEESP Research & Education Conference. (20-23 June 2023, Boston, MI)
12. Dowdell, K.; Potgieter, S.; Lee, S.; Song, A.; Gabrielli, M.; Olsen, K.; Vedrin, M.; LiPuma, J. J.; Cambronne, E.; Pinto, A.; Delafont, V.; Raskin, L.; Kirisits, M. J. (2023), Free-living amoebae diversity in drinking water and investigating the role of preferential grazing, Free-Living Amoebae Meeting 2023, Poitiers, France, June 26-30.
13. Dowdell, K., Potgieter, S., Lee, S., Song, A., Gabrielli, M., Olsen, K., Vedrin, M., LiPuma, J., Cambronne, E., Pinto, A., Delafont, V., Raskin, L., Kirisits, M. (2023), Free-Living Amoebae Diversity in Drinking Water and Investigating the Role of Preferential Grazing. 2023 AEESP Research & Education Conference, Boston, MA, June, 20-23.
14. Puente, P., Zhu, K., Appleton, R., Fairley-Wax, T., Rauch-Williams, T., Skerlos, S., Raskin, L. Stability prediction for co-digestion of sewage sludge and food waste using a modified biomethane potential test. AEESP conference 2023, June 22, 2023, Boston, MA.
15. Zhu, K., Fairley-Wax, T., Puente, P., Karki, R., Starostka, R., Skerlos, S., Raskin, L. (2023), Model-derived Insights In a Two-phase Anaerobic Dynamic Membrane Bioreactor System for High-rate Co-digestion. AEESP conference 2023, June 22, 2023, Boston, MA
16. Puente, P., Zhu, K., Appleton, R., Fairley-Wax, T., Rauch-Williams, T., Skerlos, S., Raskin, L. Stability prediction using a modified biomethane potential test and modeling for the co-digestion of food waste and sewage sludge. 2023 Borchardt Conference 26th Triennial Symposium on Advancements in Water & Wastewater. May 23-24, 2023, Ann Arbor, MI.
17. Song, H., Fairley-Wax, T., Schraa, O., Zamanzadeh, M., Skerlos, S., Raskin, L. (2023) Biomembrane Filtration System Combines MABR and Recirculating Dynamic Membrane Bioreactor for Process Intensification. WEF/IWA Innovations in Process Engineering Conference 2023, June 6-9, Portland, OR.
18. Starostka, R., Song, H., Giammalvo, K., Fairley-Wax, T., Raskin, L., Skerlos, S. A Parallel In-situ Dynamic Membrane Analysis System (PIDMAS) for Analysis of how Backwashing Affects Extracellular Polymeric Substance (EPS) Production in Dynamic Membrane Bioreactors (DMBRs). 2023 Borchardt Conference 26th Triennial Symposium on Advancements in Water & Wastewater. May 23-24, 2023, Ann Arbor, MI.
19. Giammalvo, K., Fairley-Wax, Song, H., Raskin, L., Skerlos, S. Designing a Recirculating Dynamic Membrane Bioreactor for Full-Scale Municipal Wastewater Treatment. 2023 Borchardt Conference 26th Triennial Symposium on Advancements in Water & Wastewater. May 23-24, 2023, Ann Arbor, MI.
20. Kitt, D., Hang, S., Shrestha, S., Raskin, L., Advancing Anaerobic Biotechnologies for Product Recovery from Waste Streams - Acid whey composition impacts the efficiency of lactate-based chain elongation, poster, 2023 Borchardt Conference, Ann Arbor, MI, May 23-24, 2023.
21. Zhu, K., Lippert, T., Fairley-Wax, T., Amouamouha, M., Puente, P., Karki, R., Starostka, R., Nielsen, H., Stockard, D., Algren, M., Dunn, J. B. Wells, G., Urgun Demirtas, M., Lin, U., Skerlos,

- S., and Raskin. L., Integrated Biochemical and Electrochemical Technologies (IBET) to Recover Biomethane from Organic Waste. Borchardt Conference 2023, May 24, 2023, Ann Arbor, MI
22. Alfahham, N., Potgieter, S., Lahr, B., Raskin, L. (2023). "Assessing the impact of UV disinfection on microbial viability and community structure in a full-scale drinking water." Borchardt Conference, Ann Arbor, MI, May 23-24.
 23. Potgieter, S., Lahr, R., Vosloo, S., Dowdell, K., Vedrin, M., Page, S., Bautista-de los Santos, Q., Keown, J., Quneibi, T., Alfahham, N., Lee, S., Sandoval, S., Guo, Y., Pinto, A., Steglitz, B & Raskin, L. (2023) Assessing the impact of drinking water treatment on distribution system nitrifier populations: Collaborations between the City of Ann Arbor drinking water treatment plant and the University of Michigan. Borchardt Conference, Ann Arbor, MI, May 23-24.
 24. Puente, P., Zhu, K., Appleton, R., Fairley-Wax, T., Rauch-Williams, T., Skerlos, S., Raskin. Stability prediction using a modified biomethane potential test and modeling for the co-digestion of food waste and sewage sludge. Latinx Research Week at the University of Michigan, March 2023. [First place poster presentation award.](#)
 25. Alfahham, N., Mudge, K., Raskin, L. (2023). "Using pre-rRNA for the Species-specific Assessment of Opportunistic Pathogens in Drinking Water". 7th Annual RNA Symposium, Center for RNA Biomedicine, Ann Arbor, MI
 26. Starostka, R., Zhu, K., Fairley-Wax, T., Puente, P., Skerlos, S., Raskin, L. (2023) Assessing the temporal sensitivity of Anaerobic Digestion Model 1 (ADM1) parameters during Biochemical Methane Potential (BMP) tests of co-digestion systems [Poster presentation] IWA Water Resource Recovery Modeling (WRRmod), Jan. 18-20.

2022

27. Dowdell, K, L Raskin, T Olson, SJ Haig, D Dai, M Edwards, A Pruden. "Water Research Foundation Project 4721: Methods for Detecting and Differentiating Opportunistic Premise Plumbing Pathogens (OPPPs) to Determine Efficacy of Control and Treatment Technologies." AWWA Water Quality Technology Conference, Cincinnati, OH, USA, November 2022
28. Shrestha, S., Abdullah, M., Raskin, L., Skerlos, S. (2022), Environmental life cycle assessment of caproic acid recovery from brewery waste streams, International Chain Elongation Conference", Bad Boll, Germany, Nov 2-4, 2022.
29. Kitt, D., Hang, S., Shrestha, S., Raskin, L. (2022), Acid whey composition impacts the efficiency of lactate-based chain elongation, poster presentation, International Chain Elongation Conference, Bad Boll, Germany, November 2-4, 2022.
30. Zhu, K., Fairley-Wax, T., Puente, P., Karki, R., Starostka, R., Skerlos, S., Raskin, L. Novel Anaerobic Dynamic Membrane Bioreactor System for High-rate Co-digestion of Food Waste and Wastewater Sludge. Oral presentation at WEFTEC 2022. New Orleans, LA, 2022
31. Shrestha, S., Kitt, D., Hang, S., Raskin, L. (2022), Medium Chain Carboxylic Acid Production from Organic Waste Using Anaerobic Dynamic Membrane Bioreactors, invited workshop oral presentation, International Water Association 17th World Congress on Anaerobic Digestion, Ann Arbor, MI, June 17-22, 2022.
32. Fonoll, X. K. Zhu, L. Raskin (2022), Understanding The Role of The Biofilm/cake Layer in An Anaerobic Dynamic Membrane Bioreactor Simulating a Rumen. 17th IWA World Conference on Anaerobic Digestion (AD-17). Ann Arbor, MI, June 17-22, 2022.
33. Martinez-Paz, E.F., L. Raskin, K. Wigginton, B. Kerkez (2022), Automatic and Smart Flushing of Building Drinking Water Taps Using Real-Time ORP and Temperature Signals Automated flushing of building plumbing using real-time sensor data improves drinking water quality, 14th International Conference on Hydroinformatics, Water INFLUENCE - Water INFormatic soLutions and opEN problems in the cycle from Clouds to ocean, Bucharest, Romania, 4-8 July 2022,
34. Hegarty, B. Dowdell, K; Potgieter, S; Bastien, E; Dai, Z; Pinto, A; Raskin, L; Duhaime, M; Wigginton, K. (2022) Implications and Applications of Viral Infection Networks in Drinking Water. Association of Environmental Engineering and Science Professors (AEESP) Conference in St. Louis, MO, June 28-30, 2022
35. Zhu, K., Jafarov, E., Zhang, W., Fairley-Wax, T., Starostka, R., Skerlos, S., Raskin, L. (2022) Modeling the performance of a two-phase anaerobic dynamic membrane bioreactor system for high-rate digestion of food waste, AEESP Conference, St. Louis, MO June 28-30, 2022

36. Puente, P., Masten, S., Aggarwal, S., Kirisitis, M., Raskin, L. (2022), Environmental Engineering Laboratory Courses: From a University Teaching Lab to a Home Kitchen, AEESP Conference. St. Louis, Missouri, June 28-30.
37. Hegarty, B; Dowdell, K; Potgieter, S; Bastien, E; Dai, Z; Pinto, A; Raskin, L; Duhaime, M; Wigginton, K. (2022), Characterizing the Viral Communities of Drinking Water. Microbiomes of the Built Environment GRC in Waterville Valley, NH, June 2022
38. Zhu, K., Fairley-Wax, T., Puente, P., Karki, R., Starostka, R., Skerlos, S., Raskin, L. (2022) Two-phase anaerobic dynamic membrane bioreactor system treats food waste with high hydrolysis rate and methane yield, IWA 17th World Congress on Anaerobic Digestion (AD17), Ann Arbor, MI, June 17-22, 2022
39. Puente, P., K. Zhu, R. Appleton, T. Fairley-Wax, T. Rauch-Williams, S. Skerlos, L. Raskin, Stability estimation strategy for anaerobic co-digestion of food waste and wastewater sludge using standard characterization methods, IWA 17th World Congress on Anaerobic Digestion. Ann Arbor, MI, USA, June 17-22, 2022
40. Kitt, D., Hang, S., Shrestha, S., Raskin, L., Determining the impact of waste stream composition on lactate-based chain elongation from acid whey and food waste, oral presentation, International Water Association 17th World Congress on Anaerobic Digestion, Ann Arbor, MI, June 17-22, 2022.
41. Shrestha, S., Kitt, D., Song, H., Raskin, L. (2022), Role of dynamic membrane biofilm development on chain elongation for medium chain carboxylic acids recovery from organic waste streams”, 4th International Conference on Biogas Microbiology, Braga, Portugal, May 9-11, 2022.
42. Kitt, D., Hang, S., Shrestha, S., Raskin, L. (2022), Determining the impact of acid whey composition on lactic acid-based chain elongation efficiency and performance, oral presentation, International Conference on Biogas Microbiology, Braga, Portugal, May 9-11, 2022, [Best Oral Presentation](#).

2021

43. Shrestha, S., Kitt, D., Song, H., Raskin, L. Virtual presentation at “Harnessing biofilms for lowpressure filtration: Dynamic membrane bioreactor (DMBR) characterization, operation, and scale-up” workshop, IWA Biofilm Reactors Virtual Conference (Dec 2021)
44. Vedrin, M., Page, S., Lahr, R., Steglitz, B., Hardin, R., Raskin. Insights from evaluation of dead-end flushing program in Ann Arbor, MI. AWWA Water Quality Technology Conference (WQTC), Tacoma, Washington, USA, Nov. 2021
45. Potgieter, S., Bautista, M., Page, S., Keown, J., Lahr, R., Olson, T. & Raskin, L. Nitrifier dynamics during biofilter start-up and acclimation in full-scale drinking water treatment plant, Water Quality and Technology Conference (WQTC), Tacoma, Washington, USA, Nov 2021
46. Bautista-de los Santos, Q.M., Dowdell, K., Prasad, M., Page, S., Steglitz, B., Olson, T. and Raskin, L. Impact of chloramine exposure on the selection of non-tuberculous mycobacteria in an ozone-biofiltration plant. AWWA Water Quality and Technology Conference (WQTC) 2021 (November 7-10, 2021), Tacoma, WA, USA, Nov. 2021
47. Puente, P., Stephanie Fevig, Rashi Gupta, Lutgarde Raskin, Tanja Rauch-Williams, Christian Schaum, Larissa Schwinghammer, Christian Tasser, Recommendations for The Analysis of Source Separated Organic Food Waste to Help Inform the Design and Operation of Co-digestion Facilities, WEFTEC Oct. 2021
48. Zhu, K., Zhang, W., Jafarov, E., Solander, K., Skerlos, S., Raskin, L., Achieving high-speed simulation, analyses, and visualization for co-digestion with ADM1F modeling platform. Oral presentation and conference proceedings at WEFTEC 2021, Chicago, IL, 2021
49. Mark Philbrick, Shulin Chen, Kevin Harrison, Melissa Klembara, Dr. Lutgarde Raskin, Tim Seiple, Michael Thorson, Energy from Water: A Sampling of Department of Energy Wastewater Resource Recovery Projects, WEFTEC 2021, Chicago
50. Hegarty, B; Dai, Z; Raskin, L; Pinto, A; Duhaime, M; Wigginton, K. Characterizing the Global Drinking Water Virome. University of Michigan Microbiomes seminar series, Ann Arbor, MI, Oct. 2021.
51. Dowdell, K, H Greenwald, M Grimard-Conea, S Pitell, S Joshi, C Ley, L Kennedy, K Nelson, L Raskin, F Hammes, C Proctor, M Prevost, K Hamilton, SJ Haig, K Pieper, E Garner, W Rhoads. “A survey of Legionella pneumophila occurrence in stagnated building water during the COVID-19 pandemic”. Building Water SLAM (Stagnation, Legionella, and Metals), West Lafayette, Indiana, USA, July 2021.

52. Fonoll X., Zhu K., Raskin L. Development of a bioreactor based on rumen physiology to grow rumen microbes for efficient hydrolysis of lignocellulosic biomass, ISAM2021 Online International Symposium on Anaerobic Microbiology, June 16-17, 2021.
53. Puente, P., Masten, S., Aggarwal, S., Kirisitis, M., Raskin, L., Environmental Engineering Lab to Kitchen, MSU Teaching seminar, East Lansing, MI, May 6, 2021.
54. Puente, P., Masten, S., Aggarwal, S., Kirisitis, M., Raskin, L., Environmental Engineering Laboratory from Home Overcoming Remote Learning Challenges, Enriching Scholarship 2021, Ann Arbor, MI, May 3 – 5, 2021.
55. Shrestha, S., Skerlos, S., Raskin, L. (2021), Production of platform chemicals from organic waste stream”, Virtual Engineering Research Symposium, University of Michigan, Jan 2021.
56. Rockey, N., Raskin, L., Wigginton, K.R., Novel approaches to monitor virus fate through water treatment processes. Virtual Engineering Research Symposium 2021, Ann Arbor, MI
57. Puente, P., Rauch-Williams, T., Gupta, R., Tasser, R., Appleton, R., Raskin, L., Schaum, C., Steiniger, B., Ebner, C., Fevig, S., Source Separated Organic Food Waste Characteristics and Implication for Codigestion Performance, Operation, and Design, WEF Residuals and Biosolids 2021 conference: a virtual event, May 11 – 13, 2021.
58. Kuang Zhu, Tim Fairley, Xavier Fonoll Almansa, Elchin Jafarov, Jeremy Nyitrai, Lutgarde Raskin, Steven Skerlos, Meltem Urgun-Demirtas, Wenjuan Zhang, Denver Presentation Title: 1391 - Enhancing Anaerobic Digestion of Food Waste with A Novel Two-phase Anaerobic Dynamic Membrane Bioreactor System
59. Fonoll, X., K. Zhu, L. Raskin. Development of dynamic membrane bioreactor based on rumen physiology to grow anaerobic fungi. Anaerobic fungi network webinar sessions. Online, April 2021.

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60. Puente, P., Van Steendam, C., Raskin, L., Rauch-Williams, T., Schaum, C., Schwinghammer, L., Steiniger, B., Source Separated Organics for Co-digestion at Water Resource Recovery Facilities: Analysis Plan and Laboratory Protocols, Brazil Session – Circular Economy, Latin American Meetings on Anaerobic Digestion, October 22 – November 12, 2020.
61. Bautista, Q. M., K. Dowdell, M. Prasad, J. Huizenga, B. Steglitz, S. Page, T. Olson and L. Raskin (2020), Assessment of backwashing strategy on microbial community structure and nontuberculous mycobacteria selection in GAC biofilters, Water Quality Technology Conference (WQTC), Nov. 15-19, Schaumburg, Illinois.
62. Vedrin, M., S. Potgieter, K. Dowdell, S. Page, B. Steglitz, R. Hardin, and L. Raskin (2020), Rethinking drinking water quality monitoring through historical data analysis and enhanced monitoring in Ann Arbor, MI, Water Quality Technology Conference (WQTC), Nov. 15-19, Schaumburg, Illinois.
63. Dowdell, K., S. Potgieter, M. Vedrin, K. Olsen, L. Raskin (2020). Evaluating the impacts of the COVID-19 pandemic on building water in a chloraminated system. Building Water Research Symposium, West Lafayette, Indiana, USA, October 2020.
64. Fairley-Wax, T., Skerlos, S., Raskin, L. (2020) Long-term performance of a recirculating anaerobic dynamic membrane bioreactor for mainstream domestic wastewater treatment, WEFTEC
65. Dowdell, K., S. Potgieter, K. Olsen, M. Vedrin, L. Caverly, J. J. LiPuma, L. Raskin, Nontuberculous mycobacteria in drinking water systems - how source, treatment processes, and distribution influence concentrations, Microbiology of the Built Environment Gordon Research Conference, June 7-12, 2020, Andover, NH
66. Shrestha, S., Kitt, D., Song, H., Raskin, L. Virtual presentation on “Role of dynamic membrane development on chain elongation for medium chain carboxylic acids production”, the International Water Association (IWA) Biofilms 2020 Virtual Conference, Wageningen, The Netherlands (Dec 2020)
67. Shrestha, S., Xue, S., Kitt, D., Song, H., Raskin, L. Virtual presentation on “Role of dynamic membrane development on chain elongation for medium chain carboxylic acids production”, International Chain Elongation Virtual Conference (Aug 2020)
68. Rockey, N.*, Arts, P.J., Li, L., Harrison, K., Langenfeld, K., Fitzsimmons, W.J., Luring, A.S., Love, N.G., Kaye, K.S., Raskin, L., Roberts, W.W., Hegarty, B., Wigginton, K.R., June 2020. Decontamination of N95 respirators. UM Biosciences Virtual Symposium, Ann Arbor, MI (virtual).

69. S., Xue, S., Kitt, D., Song, H., Fonoll, X., Truysers, C., Raskin, L. (2020) Platform presentation on "Development of anaerobic bioreactor system for medium chain carboxylic acids recovery from organic waste streams", Borchardt Conference, Ann Arbor, USA, Feb 2020
70. Fairley-Wax, T., Van Steendam, C., Sun, A., Pascoe, D., Hayter, L., Skerlos, S., Raskin, L. (2020) Long-term Performance of a Recirculating Anaerobic Dynamic Membrane Bioreactor (RAnDMBR) Treating Municipal Wastewater. Borchardt Conference, Ann Arbor, USA, Feb 25-26, 2020
71. Dowdell, K, S Potgieter, S Page, M Vedrin, M Bautista, K Olsen, LJ Caverly, JJ LiPuma, L Raskin. "Nontuberculous mycobacteria (NTM) in drinking water- understanding how treatment and distribution influence abundance and composition and looking ahead to compliance monitoring." Borchardt Conference, Ann Arbor, MI, USA, February 25-26, 2020.
72. Rockey, N., Henderson, J.B., Raskin, L., Wigginton, K.R., February 2020. Novel approaches to monitor virus fate through water treatment processes. 25th Triennial Borchardt Conference 2020, Ann Arbor, MI.
73. Bautista, M, K Dowdell, M Prasad, M Meta, B Steglitz, S Page, L Sanford, T Olson, L Raskin. "Microbial community structure and abundance of opportunistic bacterial pathogens in full-scale biofilters for drinking water production (WRF 4743)." AWWA International Symposium on Potable Reuse and Biological Treatment, Atlanta, GA, USA, February 2020.

2019

74. Bautista-de los Santos, Q.M., K. Dowdell, K., M. Prasad, J. Huizenga, S. Page, B. Steglitz, T. Olson, and L. Raskin (2019). Microbial community structure and abundance of opportunistic pathogens in full-scale biofilters for drinking water production. IWA Microbial Ecology and Water Engineering (MEWE) Specialist Group Conference, Nov. 17-20, 2019, Hiroshima, Japan.
75. Bautista, Q. M., K. Dowdell, M. Prasad, B. Steglitz, S. Page, T. Olson, L. Raskin (2019), Impact of filter backwashing strategy on the selection for opportunistic bacterial pathogens in an ozone-biofiltration pilot plant. Water Quality Technology Conference, Dallas, Texas, Nov. 3–7.
76. Shen, Y., S.-J. Haig, L. C. Marr, and L. Raskin (2019). Viability of nontuberculous mycobacteria in shower water and indoor air. Water Quality Technology Conference, Dallas, Texas, Nov. 3–7.
77. Fonoll, X., Shrestha, S., Raskin, L. "A novel anaerobic bioprocess to transform urban organic waste streams into sustainable resources", WEFTEC, Chicago, USA (Sept 2019)
78. Fairley T., Jalgaonkar, N., Fonoll Almansa, X., Van Steendam, C., Raskin, L., Skerlos, S. (2019) Maximizing Energy Recovery in Anaerobic Membrane Bioreactors (AnMBRs) by Minimizing Permeate Dissolved Methane and Eliminating Biogas Sparging, WEFTEC, Chicago, Sept 2019
79. Rockey, N., Young, S., Pecson, B., Wobus, C., Raskin L., Kohn, T., Wigginton, K. (2019), Estimating the Infectivity of Human Norovirus and Other Single-Stranded RNA Viruses through Low-Pressure UV Disinfection. 20th International Symposium on Health-Related Water Microbiology, Vienna, Austria. September 15-20.
80. Dowdell, K., O. Köster, U. von Gunten, L. Caverly, J. LiPuma, F. Hammes, L. Raskin (2019), Characterizing changes to opportunistic pathogen concentrations in a full-scale, multi-step ozone-biologicalfiltration drinking water treatment plan, 20th International Symposium on Health-Related Water Microbiology, Vienna, Austria. September 15-20.
81. Zamorano-López, N., R. Serna-García, X. Fonoll, S. Shrestha, D. Aguado, L. Borrás, A. Seco, L. Raskin (2019), Insights in the role of active bacterial, archaeal, and eukaryal populations in raw microalgae biomass degradation in an anaerobic membrane bioreactor, IWA 16th World Congress on Anaerobic Digestion. Delft, The Netherlands, June 23-27.
82. Shrestha, S., B. Colcord, M. Muermans, L. Aley, X. Fonoll, L. Raskin (2019), Production of medium chain carboxylic acids from brewery waste using anaerobic fermentation technology, IWA 16th World Congress on Anaerobic Digestion. Delft, The Netherlands, June 23-27.
83. Fonoll, X., T. Meuwissen, L. Aley, S. Shrestha, and L. Raskin (2019), Development of dynamic membrane bioreactor based on rumen physiology for efficient hydrolysis of lignocellulosic biomass, IWA 16th World Congress on Anaerobic Digestion. Delft, The Netherlands June 23-27.
84. Nguyen, D., Z. Wu, S. Shrestha, P.-H. Lee, L. Raskin, S.K., Khanal (2019), High solids anaerobic digestion of lignocellulosic biomass via oxidation-reduction potential-based micro-aeration, IWA 16th World Congress on Anaerobic Digestion. Delft, The Netherlands June 23-27.

85. Fairley, T., C. Van Steendam, L. Raskin, S. Skerlos (2019), Treatment of domestic wastewater with recirculating anaerobic dynamic membrane bioreactor, IWA 16th World Congress on Anaerobic Digestion. Delft, The Netherlands June 23-27.
86. Shrestha, S., Xue, S., Setiawan, L., Fonoll, X., Raskin, L. (2019), Recovery of medium chain carboxylic acids from urban organic waste streams", Annual Sustainable Research Network Retreat, Minneapolis, Minnesota, May 2019
87. Rockey, N., L. Raskin, K. Wigginton (2019), Near Real-Time Monitoring of Virus Particles with Flow Virometry in Water Reuse Applications, AEESP Conference. Tempe, Arizona, May 14-16.
88. Shen, Y., S.-J. Haig, A.J. Prussin II., L. Marr, L. Raskin (2019), Identification and quantification of nontuberculous mycobacteria transferred from shower water to indoor air during showering events, AEESP Conference. Tempe, Arizona, May 14-16.
89. Dowdell, K., S.-J. Haig, D. Dai, A. Pruden, T. Olson, and L. Raskin (2019), Development of a standardized molecular approach for the rapid detection and quantification of opportunistic bacterial pathogens in drinking water, AEESP Conference. Tempe, Arizona, May 14-16.
90. Bautista, M., K. Dowdell, M. Prasad, J. Huizenga, S. Page, L. Sanford, B. Steglitz, T. Olson, L. Raskin (2019), Development of microbial community and establishment of opportunistic bacterial pathogens in full-scale drinking water biofilters, AEESP Conference. Tempe, Arizona, May 14-16.
91. Lansing, S., Schueler, J., Crossette, E., Naas, K., Hurst, J., Raskin, L., Wigginton, K., Gooch, C., Aga, D., 2019. Fate of antimicrobials during dairy manure management and processing. Waste to Worth. Minneapolis, MN. April 22-26, 2019.
92. Shrestha, S., Fonoll, X., Raskin, L. "Optimizing the production of medium chain carboxylic acids from urban organic waste streams", Symposium on Biotechnology for Fuels and Chemicals, Seattle, USA. [Outstanding Student Oral presentation award](#) (Apr 2019)
93. Raskin, L., Fonoll, X., Shrestha, S. "Developing novel anaerobic bioprocesses to recover high-value resources from urban organic waste streams", Symposium on Biotechnology for Fuels and Chemicals, Seattle, USA (Apr 2019)
94. Fairley, T., N. Jalgaonkar, L. Raskin, S. Skerlos (2019), Novel Anaerobic Dynamic Membrane Biofilm Reactor Addresses Disadvantages of Conventional Anaerobic Membrane Bioreactors, 2019 Membrane Technology Conference & Exposition (AWWA/AMTA), New Orleans, LA, Feb. 25-28.

2018

95. Rockey, N., H.N. Bischel, L. Raskin, T. Kohn, B. Pecson, K. Wigginton (2018), Infectivity of Human Norovirus through Potable Reuse Disinfection Processes, ISFEV 2018 conference, Arizona State University.
96. Bautista, Q.M., K. Dowdell, B. Steglitz, L. Sanford, S. Page, T.M. Olson, L. Raskin, L. Sanford, (2018), Impact of Filter Media Age and Disinfectant Exposure on the Selection for Opportunistic Pathogens in an Ozone-Biofiltration Plant, Water Quality Technology Conference (WQTC), Toronto, ON, Canada, Nov. 11-15.
97. Dowdell, K., Haig, S.J., Dai, D., Pruden, A., Olson, T., Raskin, L. (2018), Evaluation of Detection and Quantification Methods of Opportunistic Pathogens for Drinking Water Utilities." Water Quality Technology Conference (WQTC), Toronto, ON, Nov. 11-15.
98. Shen, Y., S.-J. Haig, A. J. Prussin II, L. C. Marr, L. Raskin (2018), Effect of shower spray pattern on non-tuberculous mycobacteria abundance and microbial community structure in shower water and aerosols, Water Quality Technology Conference (WQTC), Toronto, ON, Nov. 11-15.
99. Haig S, Cahalan S, Kalikin LM, Caverly LJ, Spilker T, Raskin L, LiPuma J. (2018), Home drinking water is a source of clinically relevant CF bacterial pathogens, Pediatric Pulmonology, Sep 1 (Vol. 53, pp. 268) Presented at the North American Cystic Fibrosis Conference, Denver, Colorado. October 2018.
100. Rockey, N.,* Bischel, H.N., Raskin, L., Kohn, T., Pecson, B., Wigginton, K., October 2018. The Utility of Flow Cytometry in Water Reuse Applications. The 6th International Food & Environmental Virology Conference, Tempe, AZ.
101. Schueler, J., Lansing, S., Felton, G., Hurst, J., Naas, K., Aga, D., Crossette, E., Raskin, L., Wigginton, K., Oliver, J., Gooch, C., 2018. Fate and transport of antibiotics, genes, and nutrients in anaerobic digestion systems (poster). Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability. Sitges, Spain. September 16-19, 2018.

102. Bautista-de los Santos, Q.M., Dowdell, K., Prasad, M., Mata, M., Page, S., Sanford, L., Steglitz, B., Olson, T. and Raskin, L. (2018). What's in your biofilters? What can you do about it? Michigan AWWA Conference, Kalamazoo, Michigan.
103. Crossette, E, J Gumm, K Langenfeld, L Raskin, M Duhaime, K Wigginton (2018), Validation of a high-throughput quantitative metagenomic approach for modeling dynamics of antimicrobial resistance genes, 17th International Symposium on Microbial Ecology, ISME, Aug. 12-17, 2018, Leipzig, Germany
104. Crossette, E, J Gumm, K Langenfeld, L Raskin, M Duhaime, K Wigginton (2018), Quantitative metagenomic approach to monitor the dynamics of antimicrobial resistance gene (ARG) profiles through dairy manure treatment systems, UNC Microbiology 2018, Chapel Hill NC, May 22-24.
105. Rockey, N, T Kohn, S Young, C Wobus, B Pecson, L Raskin, K Wigginton (2018), Infectivity of Human Norovirus through Low-Dose UV Disinfection, Water Research Foundation conference Atlanta, Georgia, May 6-8, 2018
106. Shrestha, S, X. Fonoll, L. Raskin (2018), Production of medium chain carboxylic acids from brewery waste via anaerobic fermentation, ecoSTP18, Ecotechnologies for Wastewater Treatment, IWA specialist conference, London, Ontario, Canada June 25 to 27, 2018.
107. Van Steendam, C, Ordonez, F, I Smets, S Skerlos, L Raskin (2018), Re-inventing Wastewater Treatment: Developing a Novel Biofilm-Enhanced Anaerobic Membrane Bioreactor, ecoSTP18, Ecotechnologies for Wastewater Treatment, IWA specialist conference, London, Ontario, Canada June 25 to 27, 2018.
108. Fonoll, X., S. Shrestha, D. Tchouty, B. Colcord, L. Raskin. Production of Medium Chain Carboxylic Acids from Urban Organic Waste Streams Using a Novel Anaerobic Dynamic Membrane System. Integrated Urban Infrastructure Solutions for Environmentally Sustainable, Healthy, and Livable Cities. Minneapolis, USA, May 2018, [Poster award](#).
109. Fonoll, X., D. Tchouty, M. Vedrin, R. Hardin, L. Raskin (2018), Workshop: Bringing Practitioners and Researchers Together to Link Anaerobic Digestion with Water Sanitation and Hygiene in low-income Countries. African Studies Center: The first decade and beyond. Ann Arbor, USA, March 2018.
110. Kotlarz, N., M. Zimbric, J. Erickson, L. Raskin, J. J. LiPuma, L. J. Caverly (2018), Municipal Drinking Water Treatment Practices and Risk of Nontuberculous Mycobacterial Infection, American Thoracic Society Conference, May 18-23, San Diego, CA
111. Olson, T.M., Rockey, N., Shen, Y., Wax, M., Haig, S.A., Wigginton, K., Raskin, L. (2018), Impact of lead service line replacement on metal concentrations in Flint, Michigan drinking water, ACS National Meeting & Exposition, March 18-22, New Orleans, LA.

2017

112. Olson, T. M., S. J. Wright, R. Hardin, L. Raskin, B. Ellis, E. Schwartz, J. Abernethy, M. Kaufman, M. Wax, S.-J. Haig, J. Yonts, K. Heidecorn, N. Rockey, Y. Shen, D. Yeoman, Z. Hayes (2017), Effectiveness of Lead Pipe Replacement in Reducing Water Lead Levels, UM MCubed Symposium. Ann Arbor, MI. Nov. 1.
113. Kotlarz, N, SJ Haig, B Steglitz, L Sanford, JJ LiPuma, L Raskin (2018). Evaluation of Selection for Opportunistic Bacterial Pathogens during Biofiltration In Full-Scale Drinking Water Treatment Plant. American Water Works Association (AWWA) International Symposium on Biological Treatment. January Austin, TX, Jan. 24-25.
114. Rockey, N, C Wobus, T Kohn, L Raskin, K Wigginton, B Pecson (2018), Infectivity of Human Norovirus through Water Reuse Disinfection Processes, AWWA International Symposium on Potable Reuse 2018, Austin TX, Jan. 22-23, 2018,
115. Raskin, L., K. Wigginton, M. Swanson, N. Rockey, J. Yonts, S.-J. Haig, Y. Shen, L. E. Setiawan (2017), Opportunistic pathogens in Domestic Hot Water Supply and Recirculation System and Their Release to Indoor Air, UM MCubed Symposium. Ann Arbor, MI. Nov. 1.
116. Fonoll, X., S. Shrestha, M. Nielsen, L. Raskin. Dynamic membrane bioreactor based on rumen fermentation to improve hydrolysis in anaerobic digestion of lignocellulosic substrates. IWA 15th World Congress on Anaerobic Digestion. Beijing, China, Oct. 17-20, 2017
117. Nguyen, D., P. Lee, S. Shrestha, L. Raskin, S. Khanal. Automated micro-aeration system for enhancing the process stability of anaerobic digestion at high organic loading rates. IWA 15th

- World Congress on Anaerobic Digestion. Beijing, China, Oct. 17-20, 2017. [Outstanding Poster Award](#).
118. Shrestha, S., S. Fonoll, L. Raskin. Production of high value chemicals from urban organic wastes streams using anaerobic bioreactor systems. IWA 15th World Congress on Anaerobic Digestion. Beijing, China, Oct. 17-20, 2017. [Outstanding Poster Award](#).
 119. Van Steendam, C., I. Smets, L. Raskin, and S. Skerlos. Using life cycle analysis results to evaluate innovation strategies for anaerobic membrane bioreactors treating domestic wastewater. IWA 15th World Congress on Anaerobic Digestion. Beijing, China, Oct. 17-20, 2017.
 120. Shen, Y., A. J. Prussin II., SJ Haig, L. Marr, L. Raskin (2017), Quantification of Mycobacterium spp. in hot water and aerosols formed during showering. MoBE 2017: Microbiology of the Built Environment Research and Applications Symposium, Washington D.C., October 10-12, 2017
 121. Haig, SJ., N. Kotlarz, L.M. Kalikin, L. Caverly, J.J LiPuma, L. Raskin (2017). Are Opportunistic Pathogens in Premise Plumbing the Source of Infection in Children with Cystic Fibrosis? MoBE 2017: Microbiology of the Built Environment Research and Applications Symposium, Washington D.C., October 10-12.
 122. Van Steendam, C, I Smets, L Raskin, S Skerlos (2017), Using Life Cycle Analysis Results to Evaluate Innovation Strategies for Anaerobic Membrane Bioreactors Treating Domestic Wastewater, 90th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC), Chicago, IL, September 30-October 4.
 123. Crossette, E., Raskin, L., Duhaime, M., Wigginton, K. (2017), Metagenomic approach for quantifying a diverse range of antimicrobial resistance gene in environmental reservoirs, 4th International Symposium on the Environmental Dimension of Antibiotic Resistance, Lansing, MI, August 13-17, 2017.
 124. Lansing, S., Oliver JP, Schueler J, Gooch C, Felton G, Raskin L, Wigginton K, Crossette E, Langenfeld K, Hurst J Sassoubre L, Aga D. 2017. The Effect of Manure Collection and Inherent Variability on Antibiotic Testing of Dairy Manure Systems (poster). 4th International Symposium on the Environmental Dimensions of Antibiotic Resistance. Lansing, MI. August 13-17, 2017
 125. Shrestha, S., Fonoll, X., Raskin, L. (2017), Production of platform chemicals from organic waste streams using novel anaerobic systems with dynamic membranes”, Sustainable Healthy Cities Annual Workshop”, Minneapolis, Minnesota, Aug 2017
 126. Oliver, J.P., Schueler, J., Hurst, J., Crossette, E., Langenfeld, K., Gooch, C., Lansing, S., Felton, G., Wigginton, K., Raskin, L. and Sassoubre, L. (2017), Antibiotics and antibiotic resistant bacteria and genes in northeastern dairy manure management systems–Project overview and preliminary findings from an 11 farm case study, ASABE Annual International Meeting, Spokane, Washington, July 16-19.
 127. Shen, Y., M. Wax, D. Yeoman, Z. Hayes, J. Yonts, N. Rockey, SJ. Haig, G. Burke, K. Heidecorn, T. Rosencrants, J. Abernethy, E. Schwartz, B. Ellis, K. Wigginton, M. Kaufman, L. Raskin, and T. Olson, Quantification of opportunistic bacterial pathogens and metal levels before and after lead service line replacement in Flint, Michigan, AEESP Conference. Ann Arbor, Michigan, June 2017
 128. Fonoll, X., Shrestha, S., Nielsen, M., Raskin, L. Design of a novel dynamic membrane bioreactor based on rumen fermentation: Improving hydrolysis in anaerobic systems. AEESP Conference. Ann Arbor, Michigan, June 2017
 129. Haig, S.J. N. Kotlarz, L.M. Kalikin, L. Caverly, J.J LiPuma, L. Raskin (2017). Searching for a Strain-Level Match: Is Drinking Water a Source of Clinically Relevant Cystic Fibrosis Opportunistic Bacterial Pathogens? AEESP Conference, Ann Arbor, Michigan. June 20-22.
 130. Kotlarz, N., D. Berry, SJ. Haig, J.J LiPuma, L. Raskin (2017). Mycobacteria Upregulate Intracellular Parasitism Genes in Response to the Drinking Water Disinfectant Monochloramine. AEESP Conference, Ann Arbor, Michigan. June 20-22.
 131. Rockey, N., H. Bischel, T. Kohn, M. Dodd, B. Pecson, N. Fontaine, L. Raskin, and K. Wigginton (2017), White Paper on the Application of Methods to Monitor Pathogens for Potable Reuse, AEESP Conference, Ann Arbor, Michigan. June 20-22.
 132. Shen, Y., A. J. Prussin II., S.-J. Haig, L. Marr, L. Raskin (2017), Quantification of opportunistic pathogens in shower water and aerosols formed during showering, AEESP Conference, Ann Arbor, Michigan. June 20-22. [Best Presentation Award](#).
 133. Shrestha, S., Fonoll, X., Mata-Alvarez, J., Dosta Parras, J., Khanal, S.K. & Raskin, L. (2017), Synergistic Application of Microbial and Engineering Techniques to Simulate Natural Rumen

- Ecosystem in Anaerobic Digestion, 1st Symposium on Microbiological Methods for Waste & Water Resource Recovery, Delft, The Netherlands, May 18.
134. Shrestha, S., Fonoll, X., Mata-Alvarez, J., Dosta Parras, J., Khanal, S.K. & Raskin, L. Natural strategies for enhanced biogas production from anaerobic digestion of lignocellulosic biomass. 3rd International Conference on Biogas Microbiology. Wageningen, The Netherlands, May 1-2, 2017
 135. Shrestha, S., Fonoll, X., Mata-Alvarez, J., Dosta Parras, J., Khanal, S. & Raskin, L. "Synergistic Application of Microbial and Engineering Techniques to Simulate Natural Rumen Ecosystem in Anaerobic Digestion", Ghent University, Belgium, May 2017.
 136. Haig, S.J., N. Kotlarz, L.M. Kalikin, L. Caverly, J.J LiPuma, L. Raskin (2017). Are Opportunistic Pathogens in Premise Plumbing the Source of Infection in Children with Cystic Fibrosis? UNC Water Microbiology and IWA Health Related Water Microbiology Conference, Chapel Hill, North Carolina, May 15-19.
 137. Vedrin, M., van Velden, G., Hardin, R., Raskin, L. (2017). Identifying and Characterizing Indicators for Combined Water, Sanitation, and Hygiene (combined-WASH) Interventions. UNC Water and Health Conference, Chapel Hill, NC.
 138. Rockey, N, C Wobus, T Kohn, L Raskin, K Wigginton (2017). Infectivity of Human Norovirus through Water Reuse Disinfection Processes, UNC Microbiology and IWA Health Related Water Microbiology 2017, Chapel Hill NC, May 15-19.
 139. Kotlarz, N., D. Berry, S.J. Haig, J.J LiPuma, L. Raskin (2017). Mycobacteria Upregulate Intracellular Parasitism Genes in Response to the Drinking Water Disinfectant Monochloramine. UNC Water Microbiology and IWA Health Related Water Microbiology Conference, Chapel Hill, North Carolina, May 15-19.
 140. Crossette, E., Raskin, L., Duhaime, M., Wigginton, K. (2017), Quantitative metagenomic approach for classifying environmental reservoirs of antimicrobial resistance, 2017 Water Microbiology Conference and the 19th IWA-HRWM Symposium. Chapel Hill, NC, May 15-19, 2017, [Best poster in IWA-HRWM Poster contest](#).
 141. Wax, M., D. Yeoman, Z. Hayes, J. Yonts, S.J. Haig, N. Rockey, G. Burke, K. Heidecorn, J. Abernethy, E. Schwartz, B. Ellis, M. Kaufman, L. Raskin and T. Olson (2017). Water quality characteristics before and after lead service line replacement in Flint, Michigan. AWWA International Symposium on Inorganics, Detroit, Michigan, March 21-22.
 142. Rockey, N., J. Yonts, S. Haig, K. Wigginton, L. Raskin (2017), Abundance of Opportunistic Bacterial Pathogens in a Domestic Hot Water Pipe Loop System, 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.
 143. Yao, S., Raskin, L., Diana, J. (2017), Assessing nitrifying function and shrimp growth in an indoor brackish water recirculating aquaculture system. 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.
 144. Reddy, R.R., G. A. van Velden, G. D. Rodriguez, M. R. Karim, M. J. Abedin, T. M. Webster, A. Agrawal, K. F. Hayes, L. Raskin (2017). The sustainability of safe drinking water rural Bangladesh. 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.
 145. Van Steendam, C., T. Fairley, I. Smets, S. Skerlos, and L. Raskin (2017), Pilot-scale Anaerobic Membrane Bioreactor for Low Temperature Domestic Wastewater, 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.
 146. Haig, S.J., N. Kotlarz, N. Rockey, L.M. Kalikin, L. Caverly, J.J LiPuma, L. Raskin (2017). Residence Time, Pipe Material and Chemical Parameters Impact the Occurrence of Opportunistic Pathogens and Antibiotic Resistance Genes in Drinking Water. 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.
 147. Kotlarz, N., N. Rockey, T.M. Olson, S.J. Haig, L. Sanford, J.J LiPuma, L. Raskin (2017). Opportunistic Pathogenic Bacteria Survive Ozone Disinfection: Observations from a Full-Scale Drinking Water Treatment Plant. 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.
 148. Burke, G., D. Yeoman, Z. Hayes, S.J. Haig, Y. Shen, J. Yonts, M. Wax, N. Rockey, M. Kaufman, L. Raskin, and T. Olsen (2017). Water quality characteristics before and after lead service line replacement in Flint, Michigan, 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.

149. Shrestha, S., X. Fonoll, M. Nielsen, L. Raskin (2017). Production of platform chemicals from organic waste streams using novel anaerobic systems with dynamic membranes. 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.
150. Fonoll, X., S. Shrestha, B. Kunstman, J. Mata-Alvarez, S. Khanal, L. Raskin (2017). Natural strategies for enhanced biogas production from anaerobic digestion of lignocellulosic biomass. 24th Triennial Borchardt Conference, Ann Arbor, MI, February 21-22.
151. Crossette, E., Raskin, L., Wigginton, K. (2017), Extra and intracellular antimicrobial resistance genes and their fate in dairy cow manure treatment structures. 2017 Borchardt Conference, Ann Arbor, MI. February 21-22.
152. Fonoll, X., S. Shrestha, M. Nielsen, L. Raskin (2017). Production of platform chemicals from organic waste streams using novel anaerobic systems with dynamic membranes. Michigan University-wide Sustainability and Environment Conference (MUSE). Ann Arbor (USA), February 9-10.

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153. Yonts, J., J. Christopher, N. Rockey, D. MacNevin, S. Haig, N. Kotlarz, R. Corona, M. Willett, M. Seedorf, K. Wigginton, L. Raskin, Corrosion Cause Determination and Control Strategies within a Centralized Domestic Hot Water System, Water Quality Technology Conference (WQTC), Indianapolis, IN, Nov. 13-17, 2016.
154. Rockey, N., J. Yonts, S.J. Haig, K. Wigginton, L. Raskin, Abundance of Opportunistic Bacterial Pathogens in a Domestic Hot Water Pipe Loop System, Water Quality Technology Conference (WQTC), Indianapolis, IN, Nov. 13-17, 2016.
155. Haig, S.J., N. Kotlarz, N. Rockey, L.M. Kalikin, L.J. Caverly, J.J. LiPuma and L. Raskin, Respiratory Tract Opportunistic Bacterial Pathogens in Premise Plumbing and Distribution System Water Correlate with Stagnation Time and Chemical Parameters, Water Quality Technology Conference (WQTC), Indianapolis, IN, Nov. 13-17, 2016.
156. Haig, S.-J., N. Kotlarz, N. Rockey, L.M. Kalikin, L.J. Caverly, J.J. LiPuma and L. Raskin, Stagnation Time, Pipe Material and Chemical Parameters Impact the Occurrence of Opportunistic Respiratory Pathogens in Drinking Water, Microbial Ecology and Water Engineering (MEWE) and Biofilms IWA Specialist Conference, Copenhagen, Denmark, Sept. 4-7, 2016.
157. Haig, S.-J., J. Yonts, N. Rockey, G. Burke, D. Yeoman, Z. Hayes, B. Eggleston, B. Warner, C. Wilhelm, B. Ellis, K. Wigginton, M. Kaufman, T. Olson, and L. Raskin, Linking opportunistic bacterial pathogens and metal levels in drinking water samples and corroded service lines in Flint, Michigan, USA, Microbial Ecology and Water Engineering (MEWE) and Biofilms IWA Specialist Conference, Copenhagen, Denmark, Sept. 4-7, 2016.
158. Kotlarz, N., N. Rockey, T.M. Olson, S.J. Haig, J.J. LiPuma, and L. Raskin (2016), Bacteria Survive Ozone Disinfection: Observations from a Full-Scale Drinking Water Treatment Plant., Microbial Ecology and Water Engineering (MEWE) and Biofilms IWA Specialist Conference, Copenhagen, Denmark, Sept. 4-7.
159. Crossette, E., D. Aga, L. Raskin, K. Wigginton (2016), The forms and persistence of antimicrobial resistance genes in dairy farm manure treatments, Environmental Sciences: Water, Gordon Research Conference, June 26-July 1. [Honorable Mention in Student Poster Competition.](#)
160. Haig, S.-J., N. Kotlarz, N. Rockey, L.M. Kalikin, L.J. Caverly, J.J. LiPuma and L. Raskin (2016), Linking the prevalence of opportunistic respiratory pathogens to physical and chemical characteristics in drinking water systems. The 5th Annual Sloan Microbiology of the Built Environment Conference, The University of Colorado, Boulder, CO, June 1-3.
161. Rockey, N., J. Yonts, S.J. Haig, K. Wigginton, L. Raskin (2016), Abundance of Opportunistic Bacterial Pathogens in a Hot Water Pipe Loop System with Observed Changes in Water Quality, UNC Water Microbiology conference, Chapel Hill, NC, May 17-19.
162. Van Steendam, C., A. Menefee, S. Skerlos, and L. Raskin (2016), Do Anaerobic Membrane Bioreactors Have a Sustainable Future for Low Temperature Domestic Wastewater Treatment? Michigan Meeting on Microbial Communities, Unseen Partners: Manipulating Microbial Communities that Support Life on Earth, Ann Arbor, MI, May 16-18.
163. Kotlarz N, Rockey N, Haig SJ, Olson TM, Sanford L, LiPuma JJ, Raskin L (2016). Inactivation of Bacterial Populations in a Full-scale Ozone Contactor at a Drinking Water Treatment Plant. Michigan Meeting on Microbial Communities. Unseen Partners: Manipulating Microbial Communities that Support Life on Earth, Ann Arbor, MI, May 16-18.

164. Kotlarz, N., G. Upadhyaya, P. Togna, L. Raskin (2016), Bacterial Communities in Perchlorate and Nitrate Reducing Bioreactors, AWWA International Symposium: Biological Treatment, Long Beach, Calif., January 27-28.
165. Raskin, L., G. Upadhyaya, N. Kotlarz, A. Estrella-You, M. J. Kirisits, K. Hayes (2016), Hexavalent Chromium Removal From Drinking Water Sources Using Fixed-Bed Bioreactors, AWWA International Symposium: Biological Treatment, Long Beach, Calif., January 27-28.

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166. Fei, X., D. Zekkos and L. Raskin. Influential factors on methane generation and settlement of municipal solid waste during degradation - experiments and literature synthesis. 1st International Conference on Geo-Energy and Geo-Environment, ISSMGE. Dec. 4-5, 2015, Hong Kong, China.
167. Smith, A.L., T. Shimada, and L. Raskin (2015), Microbial community characteristics of full-scale two-phase and conventional anaerobic digesters, 14th World Congress on Anaerobic Digestion, Viña del Mar, Chile, Nov. 15-18.
168. Fonoll, X., S. Shrestha, B. Kunstman, J. Mata-Alvarez, S. Khanal, L. Raskin (2015), Anaerobic digestion of lignocellulosic substrates with cow manure and rumen as potential co-substrates, 14th World Congress on Anaerobic Digestion, Viña del Mar, Chile, Nov. 15-18.
169. Shrestha, S., X. Fonoll, J. Mata-Alvarez, S. Khanal, L. Raskin (2015), Use of rumen content to enhance anaerobic digestion of lignocellulosic biomass, 14th World Congress on Anaerobic Digestion, Viña del Mar, Chile, Nov. 15-18.
170. Van Steendam, C., S. Skerlos, I. Smets, and L. Raskin (2015), Biofilm-Enhanced Anaerobic Membrane Bioreactor for Treatment of Domestic Wastewater in Cold to Moderate Climates, 14th World Congress on Anaerobic Digestion, Viña del Mar, Chile, Nov. 15-18.
171. Caverly, L.J., T. Spilker, N. Kotlarz, S. Haig, L. Raskin, J.J. LiPuma (2015) Improving nontuberculous mycobacterial DNA extraction from CF sputum samples for culture-independent analyses, 29th Annual North American Cystic Fibrosis Conference, Oct. 8-10, Phoenix, AZ.
172. Reddy, R., J. Tan, A. Kabir, S. Uddin, A. Shamim Khan, W. Ullah, A. Haqim, K. F. Hayes, L. Raskin, T.M. Clancy (2015), Safe handling and disposal of arsenic-bearing drinking water treatment wastes in Bangladesh, Fourth University of Oklahoma International WaTER Conference Sept. 21-23, Norman, Okla.
173. Pinto, A.J., D.M. Marcus, U.Z. Ijaz, G. Dick, and L. Raskin (2015), Leveraging metagenomics to elucidate bacterial dynamics in drinking water systems, IWA Specialty Conference, Biofilms in Drinking Water Systems From Treatment to Tap, Arosa, Switzerland, Aug. 23-26.
174. N. Kotlarz, S. J. Haig, J. R. Yonts, A. J. Pinto, J. LiPuma, L. Raskin (2015), Environmental Mycobacteria in Chloraminated Drinking Water, IWA Specialty Conference, Biofilms in Drinking Water Systems From Treatment to Tap, Arosa, Switzerland, Aug. 23-26.
175. Delgado Vela, J., K. J. Martin, A. McFarland, N. Beaton, L. B. Stadler, S. J. Skerlos, L. Raskin, C. B. Bott, N. G. Love (2015), Removing Nitrogen from Effluents of Anaerobic Wastewater Treatment Processes: Understanding Control and Operation through Biofilm Modeling, 250th ACS National Meeting & Exposition, August 16-20, Boston, Massachusetts
176. Haig, S.-J., N. Kotlarz, J. J. LiPuma, and L. Raskin (2015), From Source to Tap: Linking the Drinking Water Microbiome to Human Health, The 4th Annual Sloan Microbiology of the Built Environment Conference, The University of Colorado, Boulder, CO, July 15-18.
177. Kotlarz, N., S. Haig, J. Yonts, J. LiPuma, L. Raskin (2015), Nucleic acid recovery of Mycobacterium spp. from drinking water, 2015 AEESP Research and Education Conference, New Haven, June 13-16.
178. Delgado Vela, J., K. J. Martin, A. McFarland, N. Beaton, L. B. Stadler, C. B. Bott, L. Raskin, S. J. Skerlos, N. G. Love (2015), Removing Nitrogen and Dissolved Methane from Dilute Anaerobic Effluents, 2015 AEESP Research and Education Conference, New Haven, June 13-16.
179. Kotlarz, N., S. Haig, J. LiPuma, L. Raskin (2015), Nucleic acid extractions from Mycobacteria in drinking water systems, 115th American Society of Microbiology General Meeting, New Orleans, LA, May 30-June 2.
180. Shrestha, S., Fonoll, X., Mata-Alvarez, J., Raskin, L., Khanal, S.K., Anaerobic digestion of lignocellulosic biomass using rumen contents for enhanced biogas production. Poster presentation at S-1041 Annual Meeting and Symposium, Ohio. Aug 2015

181. Shrestha, S., Fonoll, X., Raskin, L., Khanal, S.K., Anaerobic digestion of lignocellulosic biomass using rumen contents for enhanced biogas production. Podium presentation at 24th Annual CTAHR Student Research Symposium, Honolulu, Hawaii. Apr 2015, [Student Oral Presentation Award of Merit](#).
182. Grobbel, L., L. Raskin, J. Diana (2015), Urban Revitalization through Aquaculture: Detroit Shrimp, Aquaculture America 2015, New Orleans, LA, Feb. 21.

2014

183. Delgado Vela J., Martin, K. J., Beaton, N., McFarland, A., Stadler, L., Bott, C. B., Raskin, L., Skerlos, S.J., Love, N.G. (2014) Nitrogen Removal Downstream of an Anaerobic Membrane Bioreactor for Domestic Wastewater Treatment. Global Challenges: Sustainable Wastewater Treatment and Resource Recovery. Kathmandu, Nepal, October 26-30.
184. Delgado Vela, J., Martin, K.J., Stadler, L.B., Bott, C. Skerlos, S.J., Raskin, L., Love, N.G. (2014), Nutrient Removal from Mainstream Anaerobic Effluents: Linking Biofilm Modeling to Experimental Design. 87th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC), New Orleans, LA, September 28-October 1.
185. Dapcic, A.D., N. G. Love, L. Raskin, T. Rauch-Williams, R. Reardon, S. Hough (2014), Carbon Management during Wastewater Treatment to Improve Energy Recovery. 87th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC), New Orleans, LA, September 28-October 1.
186. Smith, A. L., Q. Imran, J. Pierce, S. J. Skerlos, and L. Raskin (2014), Membrane Biofilm Enhancement for Improved Domestic Wastewater Treatment at Low Temperatures using Anaerobic Membrane Bioreactor. 87th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC), New Orleans, LA, September 28-October 1.
187. Rauch-Williams, T., L. Raskin, S. Skerlos, N.G. Love, C. Bott, T. Shimada (2014), Low Energy Alternatives for Activated Sludge – Anaerobic Membrane Bioreactor Treatment, CWEA Annual conference, Santa Clara, CA, April 29 - May 2.
188. Fei, X., D. Zekkos and L. Raskin. Impact of composition of municipal solid waste on methane generation rate and volume in laboratory batch and simulator tests. *Proceeding of GeoShanghai 2014*, CISMGE. Shanghai, China, May 26-28, 2014.
189. Pinto, A.J., D. Marcus, G. Dick, L. Raskin (2014), Metagenomic Insights into Bacteria that Dominate Drinking Water Bacterial Communities. *Water quality and Technology Conference*. New Orleans, Louisiana, Nov. 16-20.
190. Clancy, T.M., R. Reddy, J. Tan, K. F. Hayes, and L. Raskin (2014), Linking Microbial Activity with Arsenic Fate during Cow Dung Disposal of Arsenic-Bearing Wastes, AGU Fall Meeting, San Francisco, CA, Dec. 15-19.
191. Kotlarz, N., D. Marcus, L. Kalikin, J. LiPuma, A. Pinto, L Raskin (2014), Biogeography of drinking water bacteria along a premise plumbing flow path, International Symposium for Microbial Ecology (ISME). Seoul, South Korea, August 24-29.
192. Pinto, A. J., J. Schroeder, M. Lunn, W. Sloan, and L Raskin (2014), Predicting bacterial community dynamics in drinking water systems, International Symposium for Microbial Ecology (ISME). Seoul, South Korea, August 24-29.
193. Rausch-Williams, T., R. Reardon, N.G. Love, L. Raskin, A. Dapcic, S. Grandhi (2014), Carbon Management in BNR Wastewater Treatment to Improve Energy Self-sufficiency 11th IWA Leading Edge Conference on Water and Wastewater Technologies (LET 2014), Abu Dhabi (United Arab Emirates), May 26-29.
194. Stadler, L. B., Smith, A. L., Jain, A. K., Martin, K. J., Delgado Vela, J., Puente, P., Cao, L., Frenette, S., Bott, C. B., Rauch-Williams, T., Shimada, T., Salveson, A., Love, N. G., Raskin, L., and Skerlos, S. J. (2014), Integrating Life Cycle Assessment and Experimental Research: Evaluating Anaerobic Membrane Bioreactors in Domestic Wastewater Treatment for Energy Recovery. 23th Triennial Borchardt Conference, Ann Arbor, MI, Feb. 25 – 26.
195. Kabir, A., T. M. Clancy, S. Uddin, A. S. Khan, W. Ullah, K. F. Hayes, and L. Raskin (2014), Field assessment of arsenic-bearing waste treatment options in Bangladesh, 23th Triennial Borchardt Conference, Ann Arbor, MI, Feb 25-26.
196. Kotlarz, N., D. Marcus, J. Zhao, C. Xi, A. Pinto, J. LiPuma, L Raskin (2013), Biogeography of Cystic Fibrosis Opportunists in Drinking Water, UM MCubed Symposium. Ann Arbor, MI. Nov. 15.

197. Upadhyaya, G., N. Kotlarz, K. F. Hayes, L. Raskin, J. Brown (2013), Efficient Removal Of Multiple Contaminants Using Two-Stage Biologically Active Carbon Bioreactors, 2013 Water Quality Technology Conference, Long Beach, California, November 3-6.
198. Clancy, T.M., K. V. Snyder, K. F. Hayes, L. Raskin (2013), Assessing chemical and microbial processes affecting arsenic stability in concrete containing arsenic-bearing wastes from drinking water treatment, 246th American Chemical Society National Meeting, Indianapolis, IN, Sept. 8-12.
199. Stadler, L.B., A.L. Smith, L. Cao, N.G. Love, L. Raskin, and S.J. Skerlos (2013), Energy Recovery from Wastewater: Life Cycle Comparison of Carbon Removal Technologies Upstream of Autotrophic Nitrogen Removal. *WEF/IWA Nutrient Removal and Recovery 2013: Trends in Resource Recovery and Use*, Vancouver, British Columbia, Canada, July 28-31
200. Kotlarz, N., G. Upadhyaya, P. Togna, and L. Raskin (2013), Alternative Electron Donors for Simultaneous Removal of Perchlorate and Nitrate from Drinking Water Sources, 5th International Conference, Microbial Ecology and Water Engineering 2013 (MEWE 2013), Ann Arbor, Michigan, July 7 – 10.
201. Smith, A.L., T. Shimada, and L. Raskin, Syntrophic Interactions in Full-Scale Two-Phase Anaerobic Digesters Determined by Pyrosequencing, 5th International Conference, Microbial Ecology and Water Engineering 2013 (MEWE 2013), Ann Arbor, Michigan, July 7 – 10, 2013.
202. Clancy, T.M., K. V. Snyder, K. F. Hayes, L. Raskin, Microbial activity related to arsenic-bearing waste stability in disposal environments, 5th International Conference, Microbial Ecology and Water Engineering 2013 (MEWE 2013), Ann Arbor, Michigan, July 7 – 10, 2013.
203. Pinto, A.J., J. Schroeder, M. Lunn, W. Sloan, L. Raskin, Bacterial community dynamics in drinking water systems, 5th International Conference, Microbial Ecology and Water Engineering 2013 (MEWE 2013), Ann Arbor, Michigan, July 7 – 10, 2013.
204. Clancy, T.M., K. V. Snyder, K. F. Hayes, L. Raskin Evaluating the use of concrete stabilized arsenic-bearing waste, 2013 AEESP 50th Anniversary Conference, Environmental Engineers and Scientists of 2050: Education, Research, and Practice, July 14 - 16, 2013.
205. Stadler, L.B., A. L. Smith, L. Cao, N. G. Love, L. Raskin, and S. J. Skerlos, Life Cycle Comparison of Emerging and Established Wastewater Energy Recovery Systems, 2013 AEESP 50th Anniversary Conference, Environmental Engineers and Scientists of 2050: Education, Research, and Practice, July 14 - 16, 2013.
206. Fei, X., D. Zekkos and L. Raskin (2013), Current research on energy recovery from waste biodegradation and the impact on the waste's mechanical properties. 23rd Annual Solid Waste Technical Conference, Michigan Waste Industries Association. East Lansing, MI, April 16-17.
207. Clancy, T.M., T. Chiao, A. Pinto, C. Xi, and L. Raskin, "Differential disinfection resistance of bacterial populations in effluent from biologically active carbon (BAC) filter", American Water Works Association Biological Treatment Symposium, Denver, Colorado, Mar 28-29, 2013.
208. Upadhyaya, G., N. Kotlarz, K.F. Hayes, L. Raskin, and J. Brown "Fixed-Bed Biologically Active Carbon (BAC) Bioreactors Remove Multiple Contaminants Simultaneously", American Water Works Association Biological Treatment Symposium, Denver, Colorado, Mar 28-29, 2013.
209. Cao, L., L. Raskin, J. Diana, G. Keoleian, Farming Shrimp in the United States: Is Local Better?, World Aquaculture Society, Aquaculture 2013, Nashville, Tennessee, Feb. 21-25, 2013
210. Stadler, L. B., Smith, A. L., Cao, L., Love, N. G., Raskin, L., and Skerlos, S. J. Life cycle comparison of emerging and established wastewater energy recovery systems. In Mainstream Anaerobic Treatment Systems for Energy Neutral Wastewater Management Workshop at the 86th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC), Chicago, IL, October 5 – 9, 2013.
211. Fei, X., Zekkos, D., and Raskin, L. (2013). A laboratory landfill simulator for physical, geotechnical, chemical and microbial characterization of solid waste biodegradation processes. *Proceedings of Technical Committee 215 Coupled Phenomena in Environmental Geotechnics Symposium 2013*, ISSMGE, Torino, Italy, July 1-3 Taylor & Francis Group, London.
212. Fei, X., Zekkos, D., Tibbetts, S., and Raskin, L. (2013). "Characterization of Microbial Community During Anaerobic Digestion of the Organic Fraction of Municipal Solid Waste in Bioreactor Landfill Simulators." *13th World Congress on Anaerobic Digestion*. Santiago de Compostela, Spain, June 25-28.

213. Smith, A.L., L. Raskin, R.E. Kilian, and T. Shimada (2013), Microbial Community Structure in Two-Phase (Acid-Methane) Anaerobic Digesters, *13th World Congress on Anaerobic Digestion*. Santiago de Compostela, Spain, June 25-28.
214. Smith, A.L., A. Hammerbeck, S.J. Skerlos, and L. Raskin (2012), Psychrophilic Anaerobic Membrane Bioreactor Treatment of Domestic Wastewater: Evaluation of Performance and Methanogenic Activity at Varying Temperatures and Hydraulic Retention Times, *85th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC)*, New Orleans, LA, Sept. 29-Oct. 3, 2012.
215. Smith, A. L., L. B. Stadler, L. Raskin, and S. J. Skerlos (2012), Comparative LCA of Conventional and Novel Domestic Wastewater Treatment Schemes, University of Michigan LCA Symposium, Ann Arbor, MI, May 31.
216. Smith, A.L., N.G. Love, S.J. Skerlos, and L. Raskin (2012), Effects of Temperature and HRT on Performance and Environmental Impacts of Anaerobic Membrane Bioreactors for Domestic Wastewater: Treatment, International Water Association Leading Edge Technology (LET) Conference, Brisbane, Australia, June 3-7, 2012.
217. Raskin, L., K. Hayes, J. Brown, G. Upadhyaya, P. Ghosh, T. Clancy, J. Jackson, A. Jenkins, T. Chiao, M. Poll, A. Trese, K. Snyder, X. Chu, Biologically-Mediated, Simultaneous Removal of Nitrate and Arsenic from Drinking Water Sources – NSF Award CBET 0967707, NSF CBET PI Meeting, June 6-8, 2012.
218. Kotlarz, N., Upadhyaya, G., A. Hammerbeck, X. Chu, P. Togna, and L. Raskin, Alternate electron donors for biologically-mediated simultaneous removal of nitrate and perchlorate from drinking water sources, American Water Works Association Annual Conference & Exposition (ACE), Dallas, Texas, June 10-14, 2012.
219. Clancy, T., T.-H. Chiao, A. Pinto, C. Xi, L. Raskin, Tracking the survival of bacteria exposed to monochloramine disinfection in drinking water treated by a biologically active filter, ISME 14, Copenhagen, Denmark, August 19-24, 2012.
220. Schroeder, J., A. Pinto, M. Lunn, L. Raskin, and W. Sloan, Theoretical models for bacterial communities in drinking water as they travel and evolve through drinking water distribution systems, ISME 14, Copenhagen, Denmark, August 19-24, 2012.
221. Pinto, A., J. Schroeder, M. Lunn, W. Sloan, and L. Raskin, Evaluating process-related and seasonal changes in bacterial community in drinking water treatment and distribution systems, ISME 14, Copenhagen, Denmark, August 19-24, 2012.
222. Upadhyaya, G., N. Kotlarz, A. Hammerbeck, X. Chu, P. Togna, and L. Raskin, Alternate electron donors for biologically-mediated simultaneous removal of nitrate and perchlorate from drinking water sources, Michigan Section AWWA Annual Conference, Bellaire, Michigan, September 11-14, 2012.
223. Upadhyaya, G., P.K. Ghosh, K. F. Hayes, and L. Raskin, Drinking Water Production Using An Anaerobic Fixed-Bed Bioreactor From Water Sources Contaminated With Nitrate And Uranium, Water Quality Technology Conference & Exposition, Toronto, Ontario, Canada, Nov. 4-8, 2012.
224. Upadhyaya, G., N. Kotlarz, A. Hammerbeck, X. Chu, P. Togna, and L. Raskin, Alternate electron donors for biologically-mediated simultaneous removal of nitrate and perchlorate from drinking water sources, Water Quality Technology Conference & Exposition, Toronto, Ontario, Canada, Nov. 4-8, 2012.
225. Ghosh, P.K., G. Upadhyaya, L. Raskin, and K. F. Hayes, Comparison of uranium and nitrate removal from simulated groundwater using mixed microbial consortia in the presence and absence of iron, International Water Association, Conference on Microbes in Wastewater and Waste Treatment, Bioremediation, and Energy Production, BITS – Pilani, Goa campus, Goa, India, January 24 – 27, 2011.
226. Chiao, T.-H., A. Pinto, C. Xi, and L. Raskin, A Culture-Independent Method to Assess Inactivation Kinetics of Drinking Water, Michigan AWWA & MWEA Joint Expo, Lansing, MI, Feb. 8, 2011.
227. Upadhyaya, G., T.M. Clancy, J.C. Brown, K.F. Hayes, and L. Raskin, Simultaneous Removal of Nitrate and Arsenic from Drinking Water Using Fixed-bed Anaerobic Bioreactor System, 22nd Triennial Borchardt Conference, Ann Arbor, MI, Feb. 23-24, 2011.
228. Smith, A.L., H. Dorer, N.G. Love, S.J. Skerlos, and L. Raskin, Energy Recovery from Domestic Wastewater using Anaerobic Membrane Bioreactors, 22nd Triennial Borchardt Conference, Ann Arbor, MI, Feb. 23-24, 2011.

229. Brown, J.C., G. Upadhyaya, T. M. Clancy, K. F. Hayes, and L. Raskin, Simultaneous Removal of Multiple Contaminants from Drinking Water Using Fixed-bed Anaerobic Bioreactors, International Water Association Leading Edge Technology (LET) Conference, Amsterdam, The Netherlands, June 6-10, 2011.
230. Pinto, A.J., T.C. Chiao, C. Xi, and L. Raskin, Seeding mechanisms for bacterial and archaeal populations in a drinking water distribution system: a year-long microbial and chemical inventory, International Water Association Leading Edge Technology (LET) Conference, Amsterdam, The Netherlands, June 6-10, 2011.
231. Chiao, T.H., A.J. Pinto, C. Xi, and L. Raskin, A Culture-Independent Method to Assess Inactivation Kinetics of Drinking Water, American Water Works Association Annual Conference & Exposition (ACE) , Washington, D.C., June 12 -16, 2011.
232. Upadhyaya, G., T. M. Clancy, A. Jenkins, K. V. Snyder, J. C. Brown, K. F. Hayes, and L. Raskin, Point-of-use anaerobic biofilter for arsenic and nitrate removal from drinking water sources, American Water Works Association Annual Conference & Exposition (ACE), Washington D.C., Jun 12-16, 2011
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234. Pinto, A.J., T.-H. Chiao, C. Xi, L. Raskin, Bacterial Infiltration and Survival in Drinking Water Distribution Systems, Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference, Tampa, Florida, July 10-12, 2011.
235. Smith, A.L., H. Dorer, N.G. Love, S.J. Skerlos, and L. Raskin, Psychrophilic Anaerobic Membrane Bioreactor for Domestic Wastewater Treatment, Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference, Tampa, Florida, July 10-12, 2011.
236. Colby, A., Khunjar, W., Pinto, A., Ghosh, S., Raskin, L., Love, N. (2011), Impact of Copper Stress on Nitrification Performance and the Ammonia Oxidizer Community Structure in Activated Sludge, Association of Environmental Engineering and Science Professors (AEESP) Education and Research Conference, Tampa, FL. July 10-12.
237. Fei, X., D. Zekkos and L. Raskin (2011). Characterization of biodegradation processes in municipal solid waste landfills for long-term performance prediction. 2011 AEESP Education and Research Conference, Association of Environmental Engineering and Science Professors. Tampa, FL, July 10-12.
238. Colby, A., Khunjar, W., Pinto, A., Ghosh, S., Raskin, L., Love, N. Effect of Copper Stress on Ammonia Oxidizer Community Structure and Nitrification Performance in a Nitrifying Activated Sludge Wastewater Treatment Process, 2nd International Conference on Nitrification, Nijmegen, The Netherlands. July 1-7, 2011.
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240. Clancy, T., T.-H. Chiao, G. Upadhyaya, A. Pinto, J. C. Brown, K. F. Hayes, C. Xi, and L. Raskin (2011), Evaluating backwashing and disinfection to ensure optimal chemical and microbiological effluent quality from a fixed-bed bioreactor designed for simultaneous removal of nitrate, sulfate, and arsenate from groundwater, Water Quality Technology Conference & Exposition, Phoenix, Arizona, Nov. 14-17, 2011
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247. Giridhar Upadhyaya, Jeff Jackson, Tara Clancy, Jess Brown, Kim F. Hayes, and Lutgarde Raskin, "Microbial Community in a Fixed-bed Bioreactor System used for Simultaneous Removal of Nitrate and Arsenic from Drinking Water", submitted to IWA Water Research Conference, 11 – 14 April 2010, Marriott Lisbon, Portugal
248. David Berry, Chuanwu Xi, Lutgarde Raskin, Revealing biological complexity in drinking water treatment through transcriptional profiling of model bacteria: the role of non-specific and conserved stress responses submitted to IWA Water Research Conference, 11 – 14 April 2010, Marriott Lisbon, Portugal
249. Tara Clancy, Giridhar Upadhyaya, Pranab Ghosh, Jeff Jackson, Kim Hayes and Lutgarde Raskin, Biologically Active Carbon Reactors for the Removal of Arsenic and Uranium from Drinking Water, ACE10, American Water Works Association, Chicago, IL, June 20-24, 2010
250. Upadhyaya, G., J. Jackson, T. Clancy, J. Brown, K. F. Hayes, and L. Raskin Effect of Backwashing on Nitrate and Arsenic Removal from Drinking Water using Fixed-bed Biologically Active Carbon Reactors ACE10, American Water Works Association, Chicago, IL, June 20-24, 2010
251. Brown, M.N., A. Briones, J. Diana, L. Raskin, Ammonia Oxidizing Archaea and *Nitrospira*-like Bacteria in the Biofilter of a Marine Shrimp Recirculating Aquaculture System, ISME 13, August 22-27, 2010, Seattle, WA.
252. Ameet Pinto, Tzu-Hsin Chiao, Chuanwu Xi, and Lutgarde Raskin, Assessing the microbial dynamics of a drinking water treatment system to enhance biological drinking water treatment potential and water quality, ISME 13, August 22-27, 2010, Seattle, WA.
253. Dongjuan Dai, Lutgarde Raskin, Chuanwu Xi, The involvement of gene *fliA* in the interaction of *Escherichia coli* with *Stenotrophomonas* sp. in dual species biofilms, ISME 13, August 22-27, 2010, Seattle, WA.
254. Giridhar Upadhyaya, Tara Clancy, Jeff Jackson, Jess Brown, Kim Hayes, and Lutgarde Raskin, Spatial Distribution of Arsenate and Sulfate Reducing Bacteria and their Activities in a Biofilm Reactor that Simultaneously Removes Nitrate, Arsenic, and Sulfate from Drinking Water, ISME 13, August 22-27, 2010, Seattle, WA.
255. Roya Gitiafroz, Cheryl E. Devine, Laura Hug, Lutgarde Raskin, Elizabeth A. Edwards, Bacteria Involved in Benzene Biodegradation under Nitrate-Reducing Conditions, ISME 13, August 22-27, 2010, Seattle, WA.
256. Smith, A.L., H.J. Dorer, N.G. Love, S.J. Skerlos, and L. Raskin (2010), Methane Production from Domestic Wastewater using Anaerobic Membrane Bioreactors, Presented at *Biogas Summit*, Flint, Michigan, October 29.
257. Tzu-Hsin Chiao, Ameet Pinto, Chuanwu Xi, and Lutgarde Raskin, A Culture Independent Alternative to Determine Inactivation Kinetics of Mixed Microbial Communities in Drinking Water Systems, Water Quality Technology Conference & Exposition, Nov 14-18, 2010, Savannah, Georgia
258. Brown, M., A. Briones, J. Diana, and L. Raskin, Microbial Dynamics in Recirculating Systems, Aquaculture in the New Michigan Economy, Michigan Aquaculture Association Meeting, Ann Arbor, MI, February 24-25, 2009.
259. Brown, M., A. Briones, J. Diana, and L. Raskin, Niche Differentiation of Ammonia Oxidizing *Archaea* and Ammonia Oxidizing *Bacteria* in Shrimp Aquaculture Systems, IWA ASPD5, Specialised Conference on Microbial Population Dynamics in Biological Wastewater Treatment Aalborg, Denmark, May 24-27, 2009.
260. Malaisamy, R., D. Berry, L. Raskin, D. Holder, and K. Jones. 2009. Studies On Anti-Biofouling and Anti-Bacterial Microfiltration Membranes by Membrane Surface Modification Using UV Grafting. 13th IACIS International Conference on Surface and Colloid Science and 83rd ACS Colloid and Surface Science Symposium. New York, NY. June 14-19.

261. Berry, D., M. Horn, M. Wagner, C. Xi, and L. Raskin. 2009. Interactions of the bacterial pathogen *Mycobacterium avium* with amoebae. National Science Foundation Engineering Education Programs Awardees Conference. Reston, VA. Feb 1-3.
262. Upadhyaya G., T. P. Yavaraski, K. F. Hayes, and L. Raskin (2009), "Optimization of an IC/ICP-MS Method for Arsenic Species in Complex Sample Matrices", Pittcon 2009, Mar 8-13, 2009, McCormick Place, Chicago, Illinois
263. Upadhyaya, G., J. Jackson, J. Brown, K. F. Hayes, and L. Raskin, Simultaneous Removal of Nitrate and Arsenic from Drinking Water Sources using Fixed-Bed Biologically Active Carbon (BAC) Filters, Association of Environmental Engineering and Science Professors (AEESP) 2009 Conference - Grand Challenges in Environmental Engineering and Science: Research and Education, Iowa City, IA, July 26-29, 2009
264. Dai, D., L. Raskin and C. Xi, Effect of Bacterial Interactions on the Fate of Pathogens in Biofilms, Association of Environmental Engineering and Science Professors (AEESP) 2009 Conference - Grand Challenges in Environmental Engineering and Science: Research and Education, Iowa City, IA, July 26-29, 2009
265. Berry, D., M. Horn, M. Wagner, C. Xi, and L. Raskin, Student Award: Infectivity and intracellular survival of *Mycobacterium avium* in environmental *Acanthamoeba* strains and dynamics of inactivation with monochloramine, Association of Environmental Engineering and Science Professors (AEESP) 2009 Conference - Grand Challenges in Environmental Engineering and Science: Research and Education, Iowa City, IA, July 26-29, 2009
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267. Li, X., G. Upadhyaya, W. Yuen, E. Morgenroth, J. Brown, and L. Raskin, "Changes in Microbial Community Structure and Function of Drinking Water Treatment Bioreactors Upon Phosphorus Addition", Water Quality Technology Conference & Exposition, Nov 15-19, 2009, Seattle, Washington
268. Williams, L., X. Li, C. Xi, and L. Raskin, "Disinfection of a Biologically Treated Drinking Water using Monochloramine", Water Quality Technology Conference & Exposition, Nov 15-19, 2009, Seattle, Washington
269. Dai, D., L. Raskin, C. Xi. Identifying *Escherichia coli* genes involved in interactions with *Pseudomonas aeruginosa* in dual-species biofilms using cDNA microarray. 5th ASM conference on biofilms. Nov. 15-19, 2009, Mexico.
270. Rausch, K.D., R.L. Belyea, L.M. Raskin, V. Singh, D.B. Johnston, T.E. Clevenger, M.E. Tumbleson, E.F. Morgenroth (2009), "Affecting Corn Processing Nutrients Using Membrane Separation and Biological Extraction and Conversion", International Conference on Nutrient Recovery from Wastewater Streams, Vancouver, British Columbia, Canada, 10-13 May 2009., Proc. International Conf. Nutrient Recovery from Wastewater Streams, Vancouver, 2009. p. 441-456. Mavinic, D., Ashley, K. and Koch, F. (eds.). IWA Publishing, London, UK. (ISBN: 9781 8433 92323).
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272. Brown, M., A. Briones, J. Diana, and L. Raskin (2008), 7th International Conference on Recirculating Aquaculture (ICRA), Integrating Microbial Ecology and Mathematical Modeling to Predict System Performance in Shrimp Recirculating Aquaculture Systems, Roanoke, VA, July 25-27.
273. Dai, D., D. Holder, D. Berry, L. Williams, L. Raskin, and C. Xi (2008), Effects of culture conditions on mixed species biofilm development, 21st Triennial Borchardt Conference, Ann Arbor, MI, Feb. 27-28.
274. Gitiafroz, R., C.E. Washer, M. Nandi, A. Ulrich, L. Raskin, and E.A. Edwards (2008), Microorganisms responsible for anaerobic biodegradation of benzene under nitrate-reducing conditions, 21st Triennial Borchardt Conference, Ann Arbor, MI, Feb. 27-28.
275. Borrell, T.B., C. Donahue, J.C. Cho, E. Morgenroth, J. Kim, L. Raskin, and S. Skerlos (2008), Anaerobic membrane bioreactors of treatment of domestic wastewater: Fouling and fouling control, 21st Triennial Borchardt Conference, Ann Arbor, MI, Feb. 27-28.
276. Williams, L., D. Berry, D. Dai, D. Holder, C. Xi, and L. Raskin (2008), Microbial community analysis of biofilms in drinking water distribution systems, 21st Triennial Borchardt Conference, Ann Arbor, MI, Feb. 27-28.

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279. Upadhyaya, G., K. Hayes, and L. Raskin (2008), Biologically mediated simultaneous removal of arsenic, perchlorate, and nitrate from drinking water, 21st Triennial Borchardt Conference, Ann Arbor, MI, Feb. 27-28.
280. Xi, C., L. Raskin, and N. Love (2008), Antibiotic resistance in the water environment, Graham Environmental Sustainability Institute (GESI), Water, Health, + the Environment Conference, Establishing the Research Agenda, Ann Arbor, MI, March 26-27.
281. Malaisamy, R., D. Berry, D. Holder, L. Raskin, L. Lepak, and K.L. Jones (2008), Modification of Microfiltration Membranes: Implications for Biofouling, Flux Recovery and Antibacterial Properties, International Conference on Membranes and Membrane processes, ICOM-2008, Honolulu, HI, July 12-18.
282. Berry, D., M. Herzberg, A.M. Briones Jr., M. Elimelech, and L. Raskin (2008), Prefiltration of influent does not alter the bacterial community structure of biofilms on reverse osmosis membranes, American Chemical Society 235th National Meeting & Exposition, New Orleans, LA, April 6-10.
283. Herzberg, M., D. Berry, A.M. Briones Jr., L. Raskin, M. Elimelech (2008), Impact of microfiltration on biofouling of reverse osmosis membranes, American Chemical Society 235th National Meeting & Exposition, New Orleans, LA, April 6-10.
284. Herzberg, M. D. Berry, A.M. Briones Jr., L. Raskin, and M. Elimelech (2008), Impact of microfiltration on biofouling of reverse osmosis membranes. The Annual Conference of the Israeli Society for Microbiology, Rehovot, Israel, April, 2008.
285. Borrell, T.B., C. Donahue, J.C. Cho, E. Morgenroth, J. Kim, L. Raskin, and S.J. Skerlos (2008), Evaluation of fouling constituents in membrane bioreactors: Extracellular polymeric substances and inorganic precipitation, American Chemical Society 235th National Meeting & Exposition, New Orleans, LA, April 6-10.
286. Malaisamy, R., D. Berry, T.B. Borrell, D. Holder, L. Raskin, and K.L. Jones (2008), Surface modification of microfiltration membranes to decrease biofouling, American Chemical Society 235th National Meeting & Exposition, New Orleans, LA, April 6-10.
287. Tontcheva, P.T., A. Asatekin, A.M. Mayes, S.I. Padmasiri, L. Raskin, and E. Morgenroth (2008), Evaluation of antifouling ultrafiltration membranes containing PAN-g-PEO additive in anaerobic membrane bioreactors, American Chemical Society 235th National Meeting & Exposition, New Orleans, LA, April 6-10.
288. Li, X., G. Upadhyaya, W. Yuen, J. Brown, E. Morgenroth, and L. Raskin (2008), Optimizing a biologically active carbon (BAC) reactor for nitrate and perchlorate removal using biological activity and GAC adsorption capacity, American Chemical Society 235th National Meeting & Exposition, New Orleans, LA, April 6-10.
289. Dai, D., D. Holder, D. Berry, L. Williams, L. Raskin, and C. Xi (2008), Separation of *Escherichia coli* from Dual-Species Biofilms for DNA Microarray Study Using Immuno-Magnetic Separation, American Society for Microbiology, 108th General Meeting, Boston, MA, June 1-5.
290. Gitiafroz, R., C. Washer, L. Raskin, and E. Edwards (2008), Molecular Characterization of Cultures Capable of Anaerobic Biodegradation of Benzene under Nitrate-Reducing Conditions, American Society for Microbiology, 108th General Meeting, Boston, MA, June 1-5.
291. Holder, D., D. Berry, D. Dai, L. Williams, L. Raskin, and C. Xi (2008), Study of Molecular Mechanisms of *Escherichia coli* Response to Monochloramine using Flow cytometry and Inactivation Experiments, American Society for Microbiology, 108th General Meeting, Boston, MA, June 1-5.
292. Berry, D., D. Holder, D. Dai, C. Xi, and L. Raskin (2008), Bacterial gene expression during disinfection with monochloramine, 5th International Water Association Leading-Edge Conference & Exhibition on Water & Wastewater Technologies, Zurich, Switzerland, June 1-4.
293. Dai, D., D. Holder, D. Berry, L. Williams, L. Raskin and C. Xi (2008), Separation of *Escherichia coli* from dual-species biofilms for DNA microarray study using fluorescence activated cell sorting, XXIV International Congress of the International Society for Analytical Cytometry (ISAC), Budapest, Hungary, May 17-21.

294. Li, X., G. Upadhyaya, J. Brown, E. Morgenroth, and L. Raskin (2008), Inorganic Contaminants Workshop, American Water Works Association, Biological Removal of Perchlorate from Drinking Water – A study to design and optimize a system for sustained biological perchlorate removal, Albuquerque, NM, Jan. 27-29.
295. Berry, D., D. Holder, D. Dai, C. Xi, and L. Raskin (2007), Does the specific growth rate of bacteria affect their susceptibility to monochloramine? AWWA/MWEA Joint Expo 2007, Lansing, MI, Feb. 6-7.
296. Li, X., G. Upadhyaya, J. Brown, E. Morgenroth, and L. Raskin (2007), Start-up of a biologically active carbon (BAC) reactor to treat perchlorate and nitrate contaminated drinking water. Sixteenth Annual Michigan Section, AWWA/MWEA (American Water Works Association and Michigan Water Environment Association) Joint Exposition, Lansing, MI, Feb. 6-7.
297. Berry, D., D. Holder, D. Dai, C. Xi, and L. Raskin (2007), Effect of bacterial specific growth rate and growth in biofilms on kinetics of inactivation with monochloramine, 233rd American Chemical Society National Meeting, Chicago, IL, March 25-29.
298. Padmasiri, S.I., P. Tontcheva, M. Fitch, M.N. Pons, B. Norddahl, E. Morgenroth, and L. Raskin (2007), Influence of high shear on microbial community activity and structure in an anaerobic membrane bioreactor, 233rd American Chemical Society National Meeting, Chicago, IL, March 25-29.
299. Tontcheva, P., S.I. Padmasiri, B. Norddahl, L. Raskin, and E. Morgenroth (2007), Organic and inorganic fouling mechanisms in anaerobic membrane bioreactors, 233rd American Chemical Society National Meeting, Chicago, IL, March 25-29.
300. Dai, D., D. Holder, D. Berry, L. Raskin, and C. Xi (2007), Separation of Bacterial Strains from Mixed-Species Biofilms Using Immuno-Magnetic Separation and Fluorescence Activated Cell Sorting in Preparation for DNA Microarray Studies, 4th ASM Conference on Biofilms Quebec City, Quebec, Canada, March 25-29.
301. Li, X., Y.C. Choi, E. Morgenroth, and L. Raskin (2007), Optimization of Backwash Strategy to Maintain Continuous Perchlorate Reduction with a Fixed Bed Biofilm Reactor, 4th ASM Conference on Biofilms, Quebec City, Canada, March 25-29.
302. Berry, D., D. Holder, D. Dai, C. Xi, and L. Raskin (2007), Effect of growth in biofilms, specific growth rate and growth temperature on kinetics of inactivation with monochloramine, 4th ASM Conference on Biofilms Quebec City, Quebec, Canada, March 25-29.
303. Holder, D.J., D.M. Berry, D. Dai, L. Raskin, and C. Xi (2007), Analysis of the Mechanisms of *Escherichia coli* Response to Monochloramine By Flow Cytometry, 107th American Society of Microbiology General Meeting, Toronto, Canada, May 21-25.
304. Li, X., E. Morgenroth, and L. Raskin (2007), Solution-Based Hybridization Assay using Peptide Nucleic Acid Molecular Beacons (PNA MBs) to Quantify rRNA of Specific Microbial Groups, 107th American Society of Microbiology General Meeting, Toronto, Canada, May 21-25.
305. Zhou, Z., L. Raskin, J. Zilles (2007), Cumulative Effects of Land Application of Manure on Levels of Antimicrobials and Antimicrobial Resistant Bacteria in Soils, 107th American Society of Microbiology General Meeting, Toronto, Canada, May 21-25.
306. Borrell, T., T. Jackson, S. Padmasiri, C. Plugge, E. Morgenroth, S. Skerlos, and L. Raskin (2007), Environmentally sustainable treatment of domestic wastewater using anaerobic membrane bioreactors, Association of Environmental Engineering and Science Professors (AEESP) Conference – Interactions at the Interface, Blacksburg, VA, July 28-Aug. 1.
307. Li, X., G. Upadhyaya, J. Brown, E. Morgenroth, and L. Raskin (2007), Biological treatment of perchlorate-contaminated drinking water – Scale-up study to evaluate backwash strategies, Association of Environmental Engineering and Science Professors (AEESP) Conference – Interactions at the Interface, Blacksburg, VA, July 28-Aug. 1.
308. Berry, D., D. Holder, D. Dai, C. Xi, and L. Raskin (2007), Elucidating the Molecular Mechanisms of Bacterial Resistance to Disinfection with Monochloramine, Association of Environmental Engineering and Science Professors (AEESP) Conference – Interactions at the Interface, Blacksburg, VA, July 28-Aug. 1.
309. Li, X., G. Upadhyaya, J. Brown, E. Morgenroth, and L. Raskin (2007), Start-up of a biologically active carbon (BAC) reactor to treat perchlorate and nitrate contaminated drinking water. AWWA Annual Conference and Exposition, Toronto, Canada, April 24-28.
310. Malaisamy, R., D. Berry, L. Raskin, and K.L. Jones (2007), Development of Novel Hydrophilic Bactericidal Membranes. 2007 AIChE Annual Meeting, Salt Lake City, UT, November, 5-9.

311. Padmasiri, S., P. Tontcheva, M. Fitch, M.N. Pons, B. Norddahl, E. Morgenroth, and L. Raskin (2007), "Performance and Microbial Community Structure of an Anaerobic Membrane Bioreactor Treating a Synthetic Black Water." In 11th World Congress on *Anaerobic Digestion 2007 Proceedings*, Brisbane, Australia, Sept. 23-27.
312. Shimada, T., J.L. Zilles, E. Morgenroth, and L. Raskin (2007), "Effects of the Antimicrobial Tylosin on the Performance of Anaerobic Sequencing Batch Reactors." In 11th World Congress on *Anaerobic Digestion 2007 Proceedings*, Brisbane, Australia, Sept. 23-27.
313. Holder, D., D. Berry, D. Dai, L. Raskin, C. Xi. (2007), Study of Molecular Mechanisms of *Escherichia coli* Response to Monochloramine Using DNA Microarray Technology. Disinfection 2007-Current Practice and Future Trends in Disinfection: Water, Wastewater, Stormwater, Water Reuse, and Biosolids, Pittsburgh, PA, Feb. 4-7.
314. Rausch, K.D., Raskin, L.M., Belyea, R.L., Clevenger, T.E. and Tumbleson, M.E. (2006), Nitrogen and Sulfur concentrations and flow rates of corn wet milling streams, ASABE Annual International Meeting, Portland, OR, July 9-12.
315. Shimada, T., J. Zilles, E. Morgenroth, L. Raskin (2006), Effects of Macrolide Antimicrobials on the Performance of Anaerobic Treatment Systems. 79th Annual conference of the Water Environment Federation (WEFTEC), Dallas, Texas, Oct. 21-25.
316. Zhou, Z., M. Robert, L. Raskin, J. Zilles (2006), Quantification of MLS_B antimicrobial resistance in soil amended with swine waste, 106th American Society of Microbiology General Meeting, Orlando, FL, May 21-25.
317. Tontcheva, P., J. Zhang, S.I. Padmasiri, M. Fitch, B. Norddahl, L. Raskin, and E. Morgenroth (2006), Membrane Fouling and Membrane Cleaning in Anaerobic Membrane Bioreactors. Materials Research Society General Meeting, Symposium on Materials Science of Water Purification, San Francisco, CA, April 18-19.
318. Padmasiri, S.I., P. Tontcheva, M. Fitch, M.N. Pons, B. Norddahl, E. Morgenroth, and L. Raskin (2006), Influence of Shear on the Microbial Community in an Anaerobic Membrane Bioreactor (AnMBR) Treating High Strength Wastewater. 11th International Symposium on Microbial Ecology (ISME-11), Vienna, Austria, Aug. 20-25.
319. Briones, A.M., J. Shililu, J. Githure, I. Kakoma, R. Novak, and L. Raskin (2006), Bacteria as Food and Larvicide: Combining Microbial Ecology and Biotechnology to Control Mosquitoes in Kenyan Rice Paddies. 11th International Symposium on Microbial Ecology (ISME-11), Vienna, Austria, Aug. 20-25.
320. Berry, D., D. Holder, C. Xi, and L. Raskin (2006), Survival Mechanisms of Bacterial Pathogens in Drinking Water Distribution Systems. MI AWWA Annual Conference, Gaylord, MI, Sept. 12-15.
321. Holder, D., D. Berry, D. Dai, L. Raskin, C. Xi (2006), Study of Molecular Mechanisms of *Escherichia coli* Response to Monochloramine Using DNA Microarray Technology and Flow Cytometry, Great Lakes International Imaging and Flow Cytometry Association Annual Meeting (GLIIFCA 15), Pittsburgh, PA, Sept. 29-Oct. 1.
322. Raskin, L., E. Morgenroth, S. Padmasiri, J. Zhang, M. Fitch, and B. Norddahl (2005), Anaerobic Membrane Bioreactors for the Production of Reusable Water and Energy from High Strength Waste, Annual WaterCAMPWS symposium, Atlanta, GA, April 13-15.
323. Morgenroth, E., C. Criddle, L. Raskin, A. Spormann, D. Yeh, M. Fitch, R. Hickey, Y. Lee, B. Norddahl, S. Padmasiri, P. Wong, C.H. Yeung, G. Wells, J. Zhang, and A. Ng (2005), "Water Reuse through Membrane Biotechnology as a New Source of Drinking Water," *WaterCAMPWS 2nd Annual Symposium*, Atlanta, GA, April 13-15.
324. Li, X., C. Xi, Y.C. Choi, E. Morgenroth, and L. Raskin (2005), High-Throughput Solution Based rRNA and Whole Cell Quantification Method using Peptide Nucleic Acid Molecular Beacons, 105th American Society of Microbiology General Meeting, Atlanta, GA, June 5-9.
325. Padmasiri, S.I., A. Zhang, M. Fitch, E. Morgenroth, and L. Raskin (2005), Microbial Community Characterization during Startup of an Anaerobic Membrane Bioreactor (AnMBR) Treating Swine Waste. 105th American Society of Microbiology General Meeting, Atlanta, GA, June 5-9.
326. Zhou, Z., A. Jindal, M. Robert, L. Raskin, and J. Zilles (2005), MLS_B Resistance Levels Vary Greatly for Different Populations in Swine Waste Samples. Joint Meeting of the 3 Divisions of the International Union of Microbiological Societies, San Francisco, CA, July 23-28.

327. Zhou, Z., M.N. Pons, L. Raskin, and J. Zilles (2005), Automated Image Analysis for Quantitative Fluorescence In Situ Hybridization in Environmental Samples, 105th American Society of Microbiology General Meeting, Atlanta, GA, June 5-9.
328. Choi, Y.C., X. Li, L. Raskin, and E. Morgenroth (2005), Effect of oxygen and backwash on biological perchlorate removal from drinking water using a biologically active carbon (BAC) fixed bed reactor, AWWA IL Section 2005 Conference, Springfield, IL, March 22-24.
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431. Mau, M., K. Hristova, D. Zheng, R. Aminov, R. Gaskins, R. Mackie, and L. Raskin (1998), Quantification of Sulfate-Reducing Bacteria Using Oligonucleotides and Fluorescence Energy Transfer (FRET), Eight International Symposium on Microbial Ecology, Halifax, Canada, Aug. 9-14.
432. Hristova, K., M. Mau, D. Zheng, R. Aminov, R. Mackie, L. Raskin, and R. Gaskins (1998), Ecology of Sulfate-Reducing Bacteria in Mammalian Intestine, Eight International Symposium on Microbial Ecology, Halifax, Canada, Aug. 9-14.
433. de los Reyes, M.F., M. Hernandez, and L. Raskin (1997), Are *Gordona amarae* Strains Abundant in Activated Sludge Foams? An Assessment Using Oligonucleotide Probe Hybridizations, 97th American Society of Microbiology General Meeting, Miami Beach, FL, May 4-8.
434. Zheng, D. and L. Raskin (1997), Development of Genus- and Species-Specific Hybridization Probes for *Methanosaeta* spp. and *Methanobrevibacter* spp. to Determine the Microbial Composition of Anaerobic Granular Sludge, 97th American Society of Microbiology General Meeting, Miami Beach, FL, May 4-8.
435. Sauer, K.D., and L. Raskin (1997), Study of Population Dynamics of Syntrophic Bacteria in Anaerobic Systems using Native and In Vitro Transcribed rRNA, 97th American Society of Microbiology General Meeting, Miami Beach, FL, May 4-8.
436. Dulekgurgen, E., D.B. Oerther, J. Danalewich, and L. Raskin (1997), Design and Characterization of Oligonucleotide Hybridization Probes to Evaluate the Competitiveness of *Acinetobacter* spp. in Activated Sludge Systems after Bioaugmentation, 97th American Society of Microbiology General Meeting, Miami Beach, FL, May 4-8.
437. Danalewich, J.R., D.B. Oerther, R.L. Belyea, M.E. Tumbleson, and L. Raskin (1997), Start-Up of Bioaugmented Sequencing Batch Reactors for Biological Phosphorus Removal, 70th Annual Conference Water Environment Federation, Chicago, IL, Oct. 18-22.
438. Oerther, D., E. Dulekgurgen, E. Leveque, D.L. Freedman, and L. Raskin (1997), Evaluation of Bioaugmentation of Sequencing Batch Reactors for Biological Phosphorus Removal Using Comparative rRNA Sequence Analysis and Phylogenetic Hybridization Probes, Second International Conference on Microorganisms in Activated Sludge and Biofilm Processes, Berkeley, CA, July 21-23.
439. Sauer, K.D., P. Stroot, R.I. Mackie, and L. Raskin (1997), Microbial Population Dynamics Linked to Performance During Anaerobic Co-Digestion of Municipal Solid Waste and Sewage Sludge, 8th International Conference on Anaerobic Digestion, Sendai, Japan, May 25-29.
440. de los Reyes, F.L., D. Oerther, M.F. de los Reyes, M. Hernandez, and L. Raskin (1997), Characterization of Filamentous Foaming in Activated Sludge Systems Using Oligonucleotide Hybridization Probes and Antibody Probes, Second International Conference on Microorganisms in Activated Sludge and Biofilm Processes, Berkeley, CA, July 21-23.
441. de los Reyes, M.F., F.L. de los Reyes, M. Hernandez, and L. Raskin (1997), Identification and Quantification of *Gordona amarae* Strains in Activated Sludge Systems Using Comparative rRNA Sequence Analysis and Phylogenetic Hybridization Probes, Second International Conference on Microorganisms in Activated Sludge and Biofilm Processes, Berkeley, CA, July 21-23.
442. Stroot, P., J.A. Barrios-Perez, J.R. Danalewich, K.D. Sauer, D.E. Schumacher, L. Raskin, R.I. Mackie, and B.A. White (1996), Start-Up and Performance of Anaerobic Co-Digestion of Municipal Solid Waste and Sewage Sludge Under Mixing and Non-Mixing Conditions, pp. 211-222. Proceedings of the Water Environment Federation 69th Annual Conference & Exposition, Volume 1, Dallas, TX, Oct. 5-9.
443. Papagiannis, T., J. Danalewich, L. Raskin, M. Tumbleson, R. Belyea, R. Gerards, and L. Vriens (1996), Biological Nutrient Removal from Food Processing Plant Wastewater, Corn Utilization Conference VI, St. Louis, MO, June 4-6.
444. Papagiannis, T., J. Danalewich, L. Raskin, M. Tumbleson, R. Belyea, R. Gerards, and L. Vriens (1996), Biological Nutrient Removal from Milk Processing Plant Wastewater, Purdue Industrial Waste Conference, West Lafayette, IN, May 6-8.

445. Kuhner, C.H., H.L. Drake, E.W. Alm, and L. Raskin (1996), Methane Production and Oxidation by Soils from Acidic Forest Wetlands of East-Central Germany, 96th American Society of Microbiology General Meeting, New Orleans, LA, May 19-23.
446. Alm, E.W., D.B. Oerther, N. Larsen, L. Raskin, and D.A. Stahl (1996), The Oligonucleotide Database, 96th American Society of Microbiology General Meeting, New Orleans, LA, May 19-23.
447. Oerther, D.B. and L. Raskin (1996), Use of 5-Nitroindole in Universal Oligonucleotide Probe Design for Quantitative Molecular Microbial Ecology Studies, 96th American Society of Microbiology General Meeting, New Orleans, LA, May 19-23.
448. de los Reyes, F.L., W. Ritter, L. Raskin, and R.I. Amann (1996), Group-Specific Small Subunit rRNA Hybridization Probes to Characterize Filamentous Foaming in Activated Sludge Systems, 96th American Society of Microbiology General Meeting, New Orleans, LA, May 19-23.
449. Zheng, D., L. Raskin, E.W. Alm, and D.A. Stahl (1996), Characterization of Small Subunit rRNA Universal Probes for Quantitative Molecular Microbial Ecology Studies, 96th American Society of Microbiology General Meeting, New Orleans, LA, May 19-23.
450. Malkos, E.V., D.K. Mann, G.K. Sims, and L. Raskin (1995), Factors Controlling Bioremediation of Petroleum Hydrocarbons in Soil, 1995 American Society of Agronomy, Crop Science Society of America, Soil Science Society of America Annual Meetings, St. Louis, MO, Oct. 29-Nov. 3.
451. Zheng, D., M.E. Griffin, P.G. Stroot, P. Misra, and L. Raskin (1995), Quantification of Microbial Groups in Anaerobic Sludge Digesters by Oligonucleotide Probe Hybridization, 95th American Society of Microbiology General Meeting, Washington, D.C., May 21-25.
452. Griffin, M.E., T. Wada, L. Raskin, R.I. Mackie, and B.A. White (1995), Evaluation of Anaerobic Co-Digestion of Municipal Solid Waste and Sewage Sludge Using Molecular Tools, OSWR Solid Waste Research Symposium, Rosemont, IL, March 28-29.
453. Griffin, M.E., T. Wada, L. Raskin, and R.I. Mackie (1995), Use of Molecular Tools to Evaluate the Start-Up and Performance of Anaerobic Digestion: Co-Digestion of Municipal Solid Waste and Sewage Sludge, 68th Annual Conference Water Environment Federation, Miami, FA, Oct. 21-25.
454. Raskin, L., D. Zheng, M.E. Griffin, and F. de los Reyes (1995), Molecular Studies of Microbial Population Dynamics in Biological Treatment Systems, 9th Forum for Applied Biotechnology, Gent, Belgium, Sept. 27-29.
455. Raskin, L., M.E. Griffin, and D. Zheng (1995), Use of Ribosomal RNA-Based Methods to Study Microbial Population Dynamics in Anaerobic Bioreactors, 1995 Society for Industrial Microbiology Annual Meeting, San José, CA, Aug. 6-11.
456. Raskin, L., D. Zheng, M.E. Griffin, P.G. Stroot, and P. Misra (1995), Characterization of Microbial Communities in Anaerobic Bioreactors Using Molecular Probes, International Meeting on Anaerobic Processes for Bioenergy and Environment, Copenhagen, Denmark, Jan. 25-27.
457. Raskin, L., B.E. Rittmann, and D.A. Stahl (1994), Use of Ribosomal RNA Based Molecular Probes for Characterization of Complex Microbial Communities During a Long-Term Study of Anaerobic Biofilm Reactors, International Research Seminar on Biological Degradation of Organic Chemical Pollutants in Biofilm Systems, Copenhagen, Denmark, May 19-21.
458. Raskin, L., B.E. Rittmann, and D.A. Stahl (1994), Molecular Studies Suggest Direct Competition Between *Desulfovibrio* and *Methanobacteriales* During a Long-Term Study of Anaerobic Biofilm Reactors, 94th American Society of Microbiology General Meeting, Las Vegas, NV, May 23-29.
459. Stahl, D.A., W. Capman, L. Raskin, E. Alm, N. Fry, and L. Poulsen (1993), Molecular Studies of Microbial Community Population Ecology and Response to Perturbation, Abstracts of the European Community Meeting on Biosafety and Microbial Ecology, Granada, Spain, Oct. 24-27.
460. Stahl, D.A., W. Capman, L. Poulsen, L. Raskin, and J. Risatti (1993), Overview of Nucleic Acid-Based Molecular Probes, Abstracts of the NATO Advanced Research Workshop on Structure, Development and Environmental Significance of Microbial Mats, Arcachon, France, Sept. 27-Oct 1.
461. Kane, M.D., L. Raskin, and D.A. Stahl (1992), Quantitative Aspects of Using Ribosomal RNA-Targeted Hybridization Probes for Studies in Microbial Ecology, p. 345, 92nd American Society of Microbiology General Meeting, New Orleans, LA, May 26 - 30.
462. Raskin, L., A. Teske, S. Toze, J. Regan, D.A. Stahl, and B.E. Rittmann (1992), A molecular Framework for the Study of Competition Between Heterotrophs and Nitrifying Autotrophs, Troisième Congrès de la Société Française de Microbiologie, Lyon, France, April 21-24.

463. Stahl, D.A., M.D. Kane, R.I. Amann, L. Raskin, R. Key, and J.M. Stromley (1991), Use of Phylogenetic Probes to Study the Relationship Between Methanogens and Sulfidogens in Multispecies Biofilms, Annual Scientific Meeting of the Australian Society for Microbiology, Gold Coast, Australia.
464. Raskin, L., D.A. Stahl, and B.E. Rittmann (1991), Mathematical Modeling of Anaerobic Biofilm Reactors, The University of Illinois Allerton Research Conference, Urbana, IL, Oct. 26-27.
465. Kane, M.D., J.M. Stromley, L. Raskin, and D.A. Stahl (1991), Molecular Analysis of the Phylogenetic Diversity and Ecology of Sulfidogenic and Methanogenic Biofilm Communities, p. 309, 91st American Society of Microbiology General Meeting, Dallas, TX, May 5-9.
466. Stahl, D.A., J.M. Stromley, L. Raskin, R.I. Amann, and M.D. Kane (1990), Molecular Analyses of the Effect of Sulfate Availability on Community Structure of Multispecies Anaerobic Biofilms, American Society of Microbiology International Conference on Multicellular Behavior of Bacteria in Nature, Industry and the Laboratory, Marine Biological Laboratory, Woods Hole, MA.

Other Publications

1. Rauch-Williams, T. L. Raskin, C. Van Steendam, P. Puente, C. Schaum, B. Steiniger, L. Schwinghammer. 2023. Project 4915A, 4915B, 4915C, 4915D - Characterization of Source Separated Food Waste for Co-digestion in Water Resource Recovery Facilities, Denver: Water Research Foundation. <https://www.waterrf.org/research/projects/characterization-and-contamination-testing-source-separated-organic-feedstocks>
2. Skerlos, S., L. Raskin, T. Fairley, N. Jalgaonkar (2023), Bioreactor insert and biofilm support, related apparatus and related methods, US Patent US20230159876A1
3. Dowdell, KS, L Raskin, TM Olson, SJ Haig, D Dai, M Edwards, A Pruden. 2022. Project 4721 - Methods for Detecting and Differentiating Opportunistic Pathogens to Determine Efficacy of Control and Treatment Technologies. Denver: Water Research Foundation. <https://www.waterrf.org/research/projects/detecting-and-differentiating-opportunistic-premise-plumbing-pathogens-determine>.
4. Bautista-de los Santos, QM, B Steglitz, L Raskin, TM Olson, KS Dowdell, S Page. 2022 Project 4743 – Optimizing Filter Operation in an Ozone-Biofiltration Plant to Reduce Selection for Opportunistic Pathogens in Drinking Water Production. Denver: Water Research Foundation. <https://www.waterrf.org/research/projects/optimizing-filter-operation-ozone-biofiltration-plant-reduce-selection>
5. Fairley-Wax, T., Skerlos, S., & Raskin, L. (2022) Next Generation Anaerobic Membrane Bioreactor for Low Temperature Domestic Wastewater Treatment. Water Research Foundation, Report 4876, Denver, CO, <https://www.waterrf.org/research/projects/next-generation-anaerobic-membrane-bioreactor-low-temperature-domestic-wastewater>
6. Raskin, L., Hayes, K.F., Brown, J.C., Upadhyaya, G., Clancy, T. M., Snyder, K.V. (2014). Nitrate and Arsenic Removal from Drinking Water with a Fixed-Bed Bioreactor, Water Research Foundation, Report 4293, Denver, CO, pp. 37.
7. Lauderdale, C., Scheitlin, P., Nyfennegger, J., Upadhyaya, G., Brown, J., Raskin, L., Chiao, T., Pinto, A.J. (2014) Optimizing Engineered Filtration. Water Research Foundation, Denver, CO, pp. 247.
8. Skerlos, S.J., L. Raskin, N.G. Love, A.L. Smith, L.B. Stadler, and L. Cao, 2013. Challenge Projects on Low Energy Treatment Schemes for Water Reuse, Phase 1 (WateReuse-10-06D). WateReuse Research Foundation, Alexandria, Virginia.
9. Raskin, L., S. Skerlos, N.G. Love, A.L. Smith (2012), Anaerobic Membrane Bioreactors for Sustainable Wastewater Treatment, Water Environment Research Foundation Final Report UN4R08, IWA Publishing, London, United Kingdom.
10. Raskin, L., Hayes, K.F., Brown, J.C., Upadhyaya, G., Clancy, T. M., Jenkins, A., Snyder, K.V., Chu, X. and Hammerbeck, A. (2011). Development and optimization of a fixed-bed bioreactor system for the simultaneous removal of nitrate and arsenic from drinking water. *Drinking Water Research*, 21(4), 14-15.
11. Brown, Jess, Chance Lauderdale, Gregorio Estavo, Axel Ettori, Winnie Shih, Sean Poust, Steven Walker, Lutgarde Raskin, Giridhar Upadhyaya, Xu Li, Eberhard Morgenroth (2008), Direct Fixed-Bed Biological Perchlorate Destruction Demonstration, ESTCP Project ER-0544

12. Lutgarde Raskin, Giridhar Upadhyaya, Kim Hayes, Jess Brown, System and Method for Simultaneous Biologically Mediated Removal of Contaminants from Contaminated Water, US Patent US 2011/0017663, Published on Jan. 27, 2011.
13. M. Fitch, A. Zhang, S. Padmasiri, L. Raskin, and E. Morgenroth, "Measuring Shear in Real Systems" Presented to the Graduate Environmental Engineering Seminar Series at the University of Missouri-Rolla, Rolla, MO, Jan. 30, 2004.
14. The article "Turning manure to fuel is making a comeback" published in Illinois Agrinews, Sept. 10, 1999, p. A6, described my research on anaerobic treatment of animal waste.
15. The article "Microbiologists Explore Life's Rich, Hidden Kingdoms" by Robert F. Service, published in *Science*, Vol. 275, March 21, 1997, 1740-1742, featured a section describing my research.
16. System Removes Nutrients from Food Processing Wastewater, *Industrial Bioprocessing*, Vol. 18, No. 8, 7-8, 1996 (L. Raskin, L. Vriens, and L. Ceyssens).

CONSULTING

Carollo Engineers, Dallas, TX
check, 2021.

Digested Organics, LLC
Design and startup evaluation of anaerobic digestion system for dairy waste treatment, 2015.

Technical Advisory Committee, Water Research Foundation Project 4459 Development of a Biofiltration Knowledge Base, 2013.

Carollo Engineers, Dallas, TX
Microbiological analyses of manganese oxidizing biological filtration systems, 2011.

Doosan Hydro Technology, Inc., Tampa, FL
Anaerobic membrane bioreactor development, March 2011.

Carollo Engineers, Dallas, TX
Microbiological analyses of anaerobic digester samples, 2010.

Carollo Engineers, Sarasota, FL
Microbiological analyses of drinking water samples and samples from BAC bioreactors, 2004, 2007.

City of Detroit Wastewater Treatment Plant, Detroit, MI 48209
Microscopic analysis of activated sludge samples, 2001, 2003, 2004.

Abbott Laboratories, Puerto Rico
Filament identification and quantification in foam samples from wastewater treatment plant, 2000.

Abbott Laboratories, North Chicago, IL 60064-4000
Filament identification and quantification in foam samples from wastewater treatment plant, 2000.

Seghers Better Technology, Wespelaar, Belgium
Evaluation of fermentation wastewater characteristics and potential for biological treatment, 1996.
Biodegradability test for biological wastewater treatment of malt wastewater, 1997.

Aurora International, Inc., Deerfield Beach, FL 33442
Bioaugmentation and biological wastewater treatment, 1994-1995.

N.V. Recyclage Gielen, Kortesseem, Belgium
Use of newsprint waste as cattle bedding and soil additive, 1994.

SERVICE

Public Service and Outreach

- I organized Environmental Engineering recruitment day for four high school students, March 25, 2016; met with prospective CoE students and parents, April 2016.
- I organized (with colleagues Ellis, Kerkez, McCormick, Wigginton, and graduate students) *The 2nd Annual Civil and Environmental Engineering High School Career Internship Program* for rising 11th and 12th grade high school student, June 20-24, 2016.
- I developed and organized (with colleagues Athanasopoulos-Zekkos, El-Tawil, Kerkez, McCormick, Wigginton, Zekkos, and graduate students) *The 1st Annual Civil and Environmental Engineering High School Career Internship Program* for rising 11th and 12th grade high school student (June 22-26, 2015) – 16 participants.
- Faculty advisor for Xplore Engineering Camp *Bacteria Run the World*, a Workshop for alumni and their children entering 4th through 7th grade, to get hands-on experience in engineering. August 9, 2013; June 26-27, 2014; June 25-26, 2015.
- A collaboration with an NGO in Bangladesh (Asia Arsenic Network - AAN) has been supported through a NSF-USAID PEER grant awarded to AAN. Ph.D. student Tara Clancy and I developed this grant with our collaborators at AAN. Tara Clancy and Raghav Reddy have continued to work closely with researchers from AAN to oversee the research. Two of AAN's scientists, S. Udin and A. Shamim Khan spent a month in our laboratories to learn methods relevant for the work in Bangladesh.
- With graduate students Roya Gitiafroz, Adam Smith, and Dongjuan Dai, Dr. Raskin organized participation in "World Water Monitoring Day (WWMD)" for 50 elementary school children (grades 3-4) in Ann Arbor, MI, June 2009. The students learned about the importance of water quality for all and sampled and analyzed Huron river water on a field trip. They submitted their data and a report to the WWMD website (<http://www.worldwatermonitoringday.org/>).
- Dr. Raskin developed and delivered, with help from graduate student Lynn Williams, two 90-min science lessons (wastewater treatment and drinking water treatment) for two groups of 25 elementary school children (grades 3-4) in Ann Arbor, MI, April 2009. The students subsequently made a field trip to local wastewater and drinking water treatment plants.
- Presented two seminars for approx. 500 water and wastewater treatment plant operators on "Pharmaceutical and Personal Care Products (PPCPs) in Drinking Water and Wastewater Treatment", MI American Water Works Association/MI Water Environment Association Joint Expo, Operator Day, Lansing, MI, Feb. 3, 2009.
- In cooperation with the Eastern Michigan University GEAR UP project (<http://emugearup.org/>), Dr. Raskin presented "on being an environmental engineer" to three groups of approx. 15 middle school students, June 26, 2007.
- Dr. Raskin developed and delivered with Diane Holder, David Berry, and a teacher, seven science lessons around water issues for two groups of 15 elementary school children (grades K-2 and 3-5) in Ann Arbor, MI, Jan. and Feb. 2006. The topics of the lessons were: Preventing Disease - students learned how illness-causing bacteria and viruses are spread; Amazing Water - students learned how actions in the home and yard affect water quality; Sum of the Parts - students learned about pollution of a river and how it can be reduced; Poison Pump - students discovered that (polluted) water can also produce negative effects for people; Water in Motion - students learned to appreciate the movement and sound of water in their environment; The Pucker Effect - students observed how ground water transports pollutants and discovered the source of contamination; Reaching Your Limits - students experienced the effort involved in meeting drinking-water quality standards.
- Panel Discussion Participant, Emerging Trends in Corn Industry - Environmental Issues, Corn Utilization & Technology Conference, St. Louis, MO, June 1-3, 1998.
- Seminar/Discussion, Livestock Waste Management, Role of Microbial Ecologists and Environmental Biotechnologists, Illinois House-Senate Joint Livestock Advisory Committee, July 10, 1997.

Professional Service

Editorial Boards and Editorships of Scientific Journals

- Guest Editor for Themed Issue Environmental Biotechnology, *Current Opinion in Biotechnology* with Per Nielsen, 2018-2019.
- Associate Editor, *Environmental Science & Technology*, 2016-present

Member, Editorial Board, *mSphere*, 2015-2018.
 Member, Editorial Board, *npj Biofilms and Microbiomes*, 2015-present
 Member, Editorial Advisory Board *Environmental Science: Water Research & Technology*, 2016-present
 Member, Editorial Board *Environmental Science: Water Research & Technology*, 2014-2016
 Guest Editor for Themed Issue Drinking Water Exposome *Environmental Science: Water Research & Technology* with Peter Vikesland, 2015-2016.
 Member, Editorial Board *Microbial Biotechnology*, 2011-2021
 Member, Editorial Board *Frontiers in Microbiology, Antimicrobials, Resistance, and Chemotherapy*, 2011-2015
 Member, Editorial Board *Biodegradation*, 1997-2017
 Associate Editor, *Water Research*, 2001-2006
 Member, Editorial Board *Archives of Microbiology*, 2001-2004
 Member, Editorial Board *FEMS Microbiology Letters*, 1997-2000

Water Environment Federation (WEF) and Water Environment Research Foundation (WERF)

Co-organizer, Workshop, WEFTEC 2013, Oct. 5-9, 2013, Chicago, IL, Mainstream Anaerobic and Nutrient Removal Systems for Energy Neutral Wastewater Management.
 Member, WERF Paul L. Busch Awardee Selection Committee, 2013-2015.
 Member, WEF Fellow Program Selection Committee, 2011, 2013-2015.
 Member, PAC WE&RF ENER5R12 "Upflow Anaerobic Sludge Blanket", Aug. 2013-present.
 Member, WEF Fellows Task Force, Fall 2009-Fall 2010.
 Member, WEF Academic Relations Advisory Committee, Fall 2008-present.
 Session Co-Chair (Anaerobic Treatment), 67th, 68th, 69th Annual Conference Water Environment Federation, Oct. 1994, Oct. 1995, Oct 1996.
 Project Subcommittee Member, WERF - Evaluate Feasibility of Methods to Minimize Biomass Production from Biotreatment, 1999-2005.
 Committee Member, WERF Workshop - Biotechnology/Industrial Ecology - A Look into the Future for Wastewater Treatment, Sept. 12-14, 1998.

International Water Association (IWA)

Member Scientific Committee, 18th IWA World Congress on Anaerobic Digestion (AD-18), Istanbul, Turkey, June 2-6, 2024.
 Member Scientific Committee of the XIV Latin American Workshop and Symposium on Anaerobic Digestion (DAAL), Querétaro, Mexico, October 23-27, 2023.
 Co-organizer of three workshops, 17th IWA World Congress on Anaerobic Digestion (AD-17), Ann Arbor, MI, June 17-22, 2022
 Co-chair, 17th IWA World Congress on Anaerobic Digestion (AD-17), Ann Arbor, MI, June 17-22, 2022 (<https://smithada.wixsite.com/my-site>).
 Member Scientific Committee, The 4th International Conference on Biogas Microbiology (ICBM-4), Braga, Portugal, May 9-11, 2022.
 Member Scientific Committee of the Virtual Latin American Meetings on Anaerobic Digestion, Uruguay, Brazil, Chili, Mexico, Oct. 22, Oct 29, Nov. 5, Nov. 12, 2020.
 Member Program and Organizing Committee – Microbial Ecology and Water Engineering (MEWE) and Biofilms IWA Specialist Conference, Hiroshima, Japan, Nov. 17-20, 2019.
 Member Scientific Committee, 16th IWA World Congress on Anaerobic Digestion (AD-16), Delft, The Netherlands, June 23-27, 2019.
 Member Scientific Committee, IWA Biofilms: Granular Sludge Conference 2018, March 18-21, Delft, The Netherlands.
 Member Scientific Committee, 15th IWA World Congress on Anaerobic Digestion (AD-15), Beijing, China, Oct 17-20, 2017.
 Member IWA Specialist Group Leadership Committee on Microbial Ecology and Water Engineering (MEWE), 2016-2019.
 Member Program and Organizing Committee – Microbial Ecology and Water Engineering (MEWE) and Biofilms IWA Specialist Conference, Copenhagen, Denmark, Sept. 4-7, 2016.
 Member IWA Specialist Group Leadership Committee on Anaerobic Digestion (AD), 2015-present.

Member International Program and Scientific Expert Committees, 14th IWA World Congress on Anaerobic Digestion, Anaerobic Digestion: Closing cycles for sustainability, Viña del Mar, Chile, Nov. 10-13, 2015.

Member Scientific Committees, IWA Specialty Conference, Biofilms in Drinking Water Systems From Treatment to Tap, Arosa, Switzerland, Aug. 23-26, 2015.

Member Program Committee – 10th IWA Leading Edge Technology (LET) Conference, June 3-6, 2013, Bordeaux, France.

Member Program and Organizing Committee – IWA SG Conference, Microbial Ecology and Water Engineering, June 2013, Ann Arbor, MI.

Member Program Committee – 9th IWA Leading Edge Technology (LET) Conference, June 3-7, 2012, Brisbane, Australia.

Co-chair Workshop Anaerobic Treatment of Low-Strength Wastewaters (with Adam Smith and Damien Batstone), 9th IWA Leading Edge Technology (LET) Conference, June 3-7, 2012, Brisbane, Australia.

Member Program Committee – IWA Leading Edge Technology (LET) Conference, May 31-June 30, 2011, Amsterdam, The Netherlands.

Chair Symposium Biological Drinking Water Treatment, IWA Leading Edge Technology (LET) Conference, May 31-June 30, 2011, Amsterdam, The Netherlands.

Member Program Committee – IWA The Water Research Conference, 11 – 14 April 2010, Lisbon, Portugal.

Member Program Committee – IWA Leading Edge Technology (LET) Conference, June 2-4, 2010, Phoenix, Arizona.

Chair Workshop Biological Drinking Water Treatment, IWA Leading Edge Technology (LET) Conference, June 2-4, 2010, Phoenix, Arizona.

Member International Program and Scientific Expert Committees, 11th World Congress on Anaerobic Digestion, Anaerobic Digestion 2007 – *Bio-energy for our Future*, Brisbane, Australia, Sept. 23-27, 2007.

Member Scientific Committee, 10th World Congress on Anaerobic Digestion, Anaerobic Digestion 2004 - *Anaerobic Bioconversion for Sustainability*, Montreal, Canada, Aug. 29-Sept. 2, 2004.

Session Chair, Anaerobic Digestion, World Congress, Montreal, Canada, Aug. 29-Sept. 2, 2004.

Session Chair, Anaerobic Digestion, World Congress, Antwerp, Belgium, Sept. 2-5, 2001.

American Water Works Association (AWWA) and Water Research Foundation

Invited workshop participant, Advancing understanding of Microbiomes in Drinking Water Distribution Systems and Premise Plumbing Using Meta-omics Techniques, National Science Foundation and Water Research Foundation, March 12-13, 2018, Denver, CO.

Member, Project Advisory Committee (PAC) “Biological Filtration: NDMA Control or Source of Precursors?”, Water Research Foundation, Feb. 2016-present.

Session Chair, AWWA International Symposium: Biological Treatment, Long Beach, Calif., January 27-28, 2016.

Session Chair, Microbiological Aspects of Biotreatment, Biological Treatment Symposium, AWWA, March 28-29, 2013, Denver, CO

Contributing Author, Research Needs for Opportunistic Pathogens in Premise Plumbing: Experimental Methodology, Microbial Ecology and Epidemiology, Project 4379 Water Research Foundation, 2011-2012.

Member, Project Advisory Committee (PAC) “Assessing Performance of Biofilm Sampling Approaches”, Water Research Foundation, Feb. 2011-April 2015.

Invited workshop participant, Biological Drinking Water Treatment, Water Research Foundation, Jan. 20-21, 2010, Denver, Colorado

Member, Biological Drinking Water Treatment Committee, Fall 2008 – present.

Member, Michigan AWWA, Research & Technical Practices (RTP) Committee, Fall 2007 – present.

Association of Environmental Engineering and Science Professors (AEESP)

Invited panel member – Building plumbing, science communication in the age of twitter and social media, AEESP Conference – Tempe, AZ, May 15, 2019.

Member Core Committee, AEESP Conference – Ann Arbor, MI, June 20-22, 2017

Member, Board of Directors (2016-2019)

Invited workshop participant, "I've Got Tenure, So Now What?: Managing the Triad of Teaching, Research, and Service Post-Tenure." June 20, 2017. AEESP Conference – Ann Arbor, MI, June 20-22, 2017.

NSF CAREER Workshop, AEESP Conference – Interactions at the Interface, Blacksburg, VA, July 28-Aug. 1, 2007.

AEESP PhD dissertation committee (member, 2000-2001; chair 2002).

National Science Foundation – review panels and workshops

Needs to be updated

NSF Environmental Engineering Program review panel, April 2-3, 2018.

NSF Environmental Sustainability Program review panel, May 18-19, 2010.

NSF Environmental Engineering Program review panel, Feb. 5-6, 2008.

NSF Workshop on Frontier Research Directions in Civil and Environmental Engineering, Arlington, VA, June 4-5, 2007.

NSF Environmental Engineering Program review panel, Dec. 13-14, 2006.

NSF Biocomplexity Program (GEN-EN) review panel, May 7-8, 2002.

NSF Workshop, "Application of Molecular Biology Tools in Environmental Engineering," Washington, D.C., April 25-26, 2002.

NSF Biocomplexity Program (IDEA) review panel, June 14-15, 2001.

Other national and international service activities

PhD committee Eleonor

NAE committee work

Served on Committee for the Research Assessment of Civil Engineering 2017-2022, TU Delft, November 2023-February 2024; Assessment Committee Report on Research in Civil Engineering, 2017-2022 at the Delft University of Technology Editors: Prof. Dr. G Dewulf, Ir. I.A. van der Esch, Prof. Dr. H. S. Mahmassani, Prof. Dr. techn. G. Meschke, Dr. Ir. D. Molenaar, Prof. Dr. L. Raskin, Dr. K. Splinter, ir. S. Laudy, 58 pages Date: February 2024.

Co-organized a Waste-to-Energy Student Symposium 2023, Ann Arbor, MI, May 25, 2023.

Conference Co-Chair, 26th Triennial Borchardt Conference, Ann Arbor, MI, May 23-24, 2023

Serving on on National Water Research Institute (NWRI) Independent Advisory Panel to advise the Los Angeles Bureau of Sanitation (LASAN) and project partners on the Hyperion Pilot Project, Spring 2020 – present.

Conference Co-Chair, 25th Triennial Borchardt Conference, Ann Arbor, MI, February 25-26, 2020.

Co-chair (with Brian Steglitz), Michigan Drinking Water Innovation Salon, May 22, 2019 - Ann Arbor, MI. Brought together Drinking water researchers and Water utility managers from across Michigan to promote partnerships between researchers and water utilities

Committee Member for Ph.D. student Nadieh de Jonge, Department of Chemistry and Bioscience, Aalborg University, Denmark, January 31, 2018.

Invited Workshop Participant, ARPA-E Rewiring Anaerobic Digestion Workshop, Arlington, VA, October 27-28, 2016

Co-chair, organizer, and reviewer for three scientific sessions on Microbial Ecology meets Environmental Biotechnology at 16th International Symposium on Microbial Ecology, ISME, Aug. 21-26, 2016, Montreal, CA

Co-chair Plenary Session The Urban Water Cycle Microbiome, ASM Microbe 2016, June 18, 2016, Boston, MA.

Conference Co-Chair, 24th Triennial Borchardt Conference, Ann Arbor, MI, Feb. 21-22, 2017.

Invited Workshop Participant, Developing the Structure of a National Energy Positive Water Resource Recovery Facility Test Bed Network, June 20-21, 2016. Denver Metro Wastewater Reclamation District, 6450 York Street, Denver, CO 80229

Partnerships for Enhanced Engagement in Research (PEER), U.S. National Academy of Sciences (NAS) Review Panel, June 6, 2016

Invited participant, The 5th Annual Sloan Microbiology of the Built Environment Conference, University of Colorado, Boulder, CO, June 1-3, 2016.

Invited Workshop Participant, From Watersheds to Shower Heads: A workshop on Legionella Research and Policy, Sponsored by the Alfred P. Sloan Foundation, May 25-26, 2016, Emory Conference Center, Atlanta, GA

Reviewer for Department of Energy, Bioenergy Technologies Office (BETO) FY17 proposals (May-June, 2016).

Reviewer for Department of Energy, SBIR/STTR FY 2016 Phase I, December 2015.

Invited Colloquium participant, FAQ: Microbiology of Built Environments, American Academy of Microbiology, Washington, DC, September 9, 2015

Invited participant, The 4th Annual Sloan Microbiology of the Built Environment Conference, July 15-18, 2015, University of Colorado Boulder

Invited NSF Workshop Participant, Closing the Human Phosphorus Loop, June 8-9, 2015, Arlington Virginia

Invited Workshop Participant, Hydrogen, Hydrocarbons, and Bioproduct Precursors from Wastewaters, National Renewable Energy Laboratory Offices, Washington DC, March 18-19, 2015

External Committee Member for Ph.D. student Qirong Dong, Department of Civil and Environmental Engineering, University of Waterloo, Waterloo, Ontario, Canada, Feb. 3, 2015.

Invited Workshop Participant, Sustainable and Resilient Water Solutions for Rural Communities, University of Glasgow, April 29-May 2, 2014

Conference Committee Member, 23rd Triennial Borchardt Conference, Ann Arbor, MI, Feb., 2014.

External Committee Member for Ph.D. student Alexandru Dumitrache, Department of Chemical Engineering, University of Toronto, Canada, January 20, 2014.

Member of Committee on Elections of American Academy of Microbiology Fellows, July 1 2013-present.

Invited Colloquium participant, Microbes in Pipes: The Microbiology of the Water Distribution System, American Academy of Microbiology, Boulder, Colorado April, 2012

Science Foundation Ireland, Research Frontiers Programme, Ecology, Evolutionary, Environmental and Organismal Biology (EOB) review panel, December 2010.

Conference Committee Member, 22nd Triennial Borchardt Conference, Ann Arbor, MI, Feb., 2011.

Academic mentor for Assistant Professor April Gu, Department of Civil and Environmental Engineering, Northeastern University, 2009-2013

External member of Environmental Biotechnology Faculty Search Committee, Tampere University, Finland, Jan. 2009-March 2009.

Chair of Faculty Interview Committee, King Abdullah University of Science and Technology (KAUST), Fall 2008.

Michigan Economic Development Corporation (MEDC), Water Technologies Cluster, Winter 2008-2010.

NIH Microbiology and Infectious Diseases Research (MID) Proposal Review Committee, June 12, 2008

Participant in Discussions Sessions: (i) Sustainable Control of Water-Associated Diseases: A Systems Approach, (ii) Spread of Antibiotic Resistance in Water Environments and Impacts on Human Health, and (iii) Global Sustainable Water Systems: Acknowledging Wastewater as a Resource, Graham Environmental Sustainability Institute (GESI), Water, Health, + the Environment Conference, Establishing the Research Agenda, Ann Arbor, MI, March 26-27, 2008.

Committee Member for Ph.D. student Roya Gitiafroz, Department of Chemical Engineering, University of Toronto, Canada, March 17, 2008, March 10, 2009.

Conference Committee Member, 21st Triennial Borchardt Conference, Ann Arbor, MI, Feb. 27-28, 2008.

Member Scientific Advisory Board of research program '*Genomics Applications for Water Management*', Institute for Inland Water Management and Waste Water Treatment RIZA, The Netherlands, Jan.-May 2007.

Member Programme Progress Assessment, Science Foundation Ireland, National University of Ireland, Galway, Oct. 25-26, 2007.

Workshop "Bridging the gap in engineered biological treatment systems – putting research into practice," Bowmore, Islay, Scotland, Oct. 3-4, 2006.

Metropolitan Water Reclamation District of Greater Chicago, examiner, civil service exams for Research Scientist II and III, Chicago, IL, June 10-11, 2005.

Workshop "Vistas in Microbial Ecology and Environmental Biotechnology," Arizona State University, April 20-21, 2005.

NASA Microbial Biology Review Panel, "Biological and Fluid Physics Research for Human Support Technology," Jan. 13-14, 2005.

Session Co-Chair, Mathematical modeling of community interactions, 103rd American Society of Microbiology General Meeting, Washington D.C., May 18-22, 2003.

External Examiner for Ph.D. of Annette Muttray, Department of Microbiology, University of British Columbia, Vancouver, Canada, Dec. 2000.

Member, Committee on Environmental Remediation at Naval Facilities, National Research Council, Water Science and Technology Board, 1997.

Invited Censor for Ph.D. of Anders Hay Sørensen, Institute of Environmental Science and Engineering, Technical University of Denmark, April 1996.

Session Chair (Molecular Tools in Environmental Biotechnology), 9th Forum for Applied Biotechnology, Gent, Belgium, Sept. 27-29, 1995.

Ad-hoc reviewer for journals

Anaerobe, Applied and Environmental Microbiology, ASCE Journal of Environmental Engineering, Biodegradation, Bioremediation Journal, Biotechnology and Bioengineering, BioTechniques, Biotechnology Progress, Chemosphere, Environmental Microbiology, Environmental Science and Technology, Environmental Toxicology and Chemistry, FEMS Microbiology Letters, FEMS Microbiology Ecology, ISME Journal, Journal of Industrial Microbiology and Biotechnology, Microbiology, Microbial Biotechnology, PLOS One, Water Research, Waste Management, Water Environment Research.

Ad-hoc reviewer for research proposals

Illinois-Indiana Sea Grant Program; Institute of Water Resources, The University of Connecticut; Natural Environment Research Council (U.K.); Natural Sciences and Engineering Research Council of Canada, NSF Division of International Programs; NSF Microbial Genetics Program; NSF Environmental Engineering Program; NSF Life in Extreme Environments (LEn), NSF Systematic Biology Program, UIUC Research Board, UIUC Critical Research Initiative, USDA NRI Value-Added Products Program, Strategic Environmental Research and Development Program (DoD), Research Council K.U.Leuven (Leuven, Belgium).

University of Michigan Service

Department of Civil and Environmental Engineering

Member, Strategic Implementation Committee, Fall 2021-Winter 2022; Fall 2023-present

Chair, Reappointment Committee, Dr. Glen Daigger, Winter 2023.

Member, Mentoring Committee Alex Szczuka, Fall 2022 – Winter 2023

Member, Mentoring Committee Jeremy Bricker, Winter 2021 – Fall 2021

Chair, Promotion and Tenure Casebook Review Committee, Dr. Terese Olson, Summer 2021-Fall 2021.

Member, Richard Lecture Committee, Fall 2019-present

Member, Graduate Committee, Fall 2017-Summer 2018

Member, Facilities and Research Committee, Fall 2017-Summer 2019

Member, Ad Hoc One-Year M.S. Committee, 2015 – 2016.

Member, CEE Executive Committee, Fall 2007-Summer 09, Fall 2013-Summer 2015, Winter 2016-Summer 2016, Winter 2022.

EWRE Graduate Program Advisor, Winter 2016-Summer 2017.

GSI OET North Campus, May 5, 2015.

Chair, Casebook Committee for Krista Wigginton reappointment committee, 2015-2016

Member, Casebook Committee for Glen Daigger's candidacy as Professor of Practice, 2014-2015

Chair, Graduate Committee, Winter-Summer 2010, Fall 2014-Summer 2017

Master's Chair, Graduate Committee, Fall 2012-Winter 2014.

Member, LAUNCH Mentoring Committee Brian Ellis, Sept 2014-May 2015.

Member, LAUNCH Mentoring Committee Krista Wigginton, Jan 2013-May 2014.

Chair, Faculty Search Committee Water-Geo-Energy Search, Fall 2013-Winter 2014.

Member, Promotion Casebook Review Committee (promotion to Professor), Dr. Jerry Lynch, Summer 2013-Fall 2013.
 Member, Space Committee, Fall 2012-Summer 2013.
 Member, Research/Equipment Committee, Fall 2010-Winter 2011.
 Faculty advisor for MI WEA/AWWA UM student group, Winter 2009-present.
 Faculty advisor for GrEENPEAS UM student group, Fall 2009-present.
 Program Director, Environmental and Water Resources Engineering (EWRE) Program, Fall 2007-Summer 2011.
 Member, Students Elements Committee, 2009
 Chair, Honors & Awards Committee, Fall 2008-Summer 12.
 Member, Curriculum Committee, Fall 2005-Summer 08.
 Member, Safety Committee, Fall 2005-Summer 07.
 Chair, EWRE graduate admissions committee, Fall 2005-Winter 2006, Fall 2007-Winter 2008.
 Chair, Reappointment Casebook Review Committee, Dr. Anna Michalak, Winter 2007.
 Member, Promotion and Tenure Casebook Review Committee (promotion to Associate Professor), Dr. Aline Cotel, Fall 2006.

College of Engineering

NAE liaison

Member, Promotion and Tenure Casebook Review Committee (promotion to Professor), Dr. Xiaoxia (Nina) Lin, Summer 2021-Fall 2021.
 Member, Ad Hoc Committee to Advise the College of Engineering on Appointments to Named Professorships, Fall 2017
 Faculty Reviewer, 2015 NextProf Workshop.
 Member, Promotion and Tenure Casebook Review Committee (promotion to Associate Professor), Dr. Xiaoxia (Nina) Lin, Summer 2013-Fall 2013.
 Member, CEE Dept. Chair Search Committee, Summer 2011-Fall 2012.
 Member, CoE Responsible Conduct of Research and Scholarship Task Force, Winter 2010-Summer 2012.
 Member, Selection Committee Weber Award in Environmental and Energy Sustainability, Winter 2010.
 Member, Reappointment Casebook Review Committee, Dr. Xiaoxia (Nina) Lin, Winter 2010.
 Member, CEE Internal Review Committee, Winter 2008-Fall 2008.
 Member, Faculty Discipline Committee, Fall 2005-Winter 2006.
 Presentation for National Advisory Committee "Global Water Sustainability", April 7, 2006.
 Chair, CEE Dept. Chair Search Committee, Winter 2006-Winter 2007.

University

Panel member – documentary

Member, Rackham's Faculty Committee on Mentoring (MORE), Winter 2020-present.
 Reviewer, External Dow Postdoctoral Fellowship applications, Graham Environmental Sustainability Institute, 2015
 Member, Program Advisory Committee, Integrated Training in Microbial Systems (ITiMS), Fall 2014-present.
 Member, LAUNCH Mentoring Committee Rose Cory, Fall 2013-Winter 2014.
 Reviewer, International Institute Individual Fellowship, University of Michigan, March 2014
 Reviewer, Dow PhD Fellowship applications, Graham Environmental Sustainability Institute, 2013
 Reviewer, UROP Fellowship applications, Summer 2013.
 Member, Biomedical Research Council (BMRC), Summer 2011-Summer 2012.
 Member, Advisory Board, MAC-EPID, 2008-2014.
 Member, Microbial Ecology Cluster Hire Search and Mentoring Committee, 2008-2014.
 Member, Executive Committee for the Graham Environmental Sustainability Institute, Winter 06-Summer 08.
 Promotion casebook reader, Office of the Provost, Winter 2008-Winter 2009.
 Co-leader Water Quality Sector, National Summit on Coping with Climate Change, University of Michigan, May 8-10, 2007.

Graduate Student Recruitment

Seminar Graduate Studies at the University of Michigan, University of Hawaii at Manoa, Manoa, HI, April 6, 2015.

Seminar Graduate Studies Information, CEE 200, Department of Civil and Environmental Engineering, UM, April 15, 2015.

UIUC Service

Department of Civil and Environmental Engineering

Faculty mentor, Eberhard Morgenroth, 2000-2005.

Faculty mentor, Tami Bond, Spring 2004-2005.

Member, Esmilla Award Committee, 2003-2005.

Member, Langelier Scholarship Award Committee, 1997-2005.

Faculty member responsible for EE&S Laboratories, Fall 1998-Summer 2002.

Faculty member responsible for EE&S Computer Lab, Fall 1993-Summer 1998.

Faculty Search Committees:

Ad-hoc EE&S, chair, Fall 2003-Spring 2004.

Environmental Council, Dept. of CEE, Dept. of Animal Sciences, member, Fall 1998-Spring 2000.

Department of CEE, member, Spring-Summer 1994, Spring 1995-Spring 1996.

Member, Promotions & Tenure Committee, Spring 2004-Spring 2005.

Member, Advisory Committee, Fall 1998-Spring 1999.

Member, Student Awards Committee, Fall 1994-Spring 1997.

Member, Curriculum Committee, Fall 1994-Spring 1996.

Organized Symposium:

Applications of Molecular Techniques in Environmental Engineering: A Symposium in Honor of Richard S. Engelbrecht, March 17-18, 1994 (with D.L. Freedman).

College of Engineering

College of Engineering Task Force on Biotechnology, Fall 1998-Spring 1999.

Organized environmental engineering demos for the "1994 Take Your Daughter to Work Day".

Campus

Faculty Search Committees

Department of Microbiology, chair, Fall 2004-Spring 2005.

WaterCAMPWS, chair, Fall 2004-Spring 2005.

Department of Agricultural Engineering, member, Fall 1998-Spring 1999.

Critical Research Initiative (CRI) Review Committee, Fall 2000-Spring 2002.

Udall Scholarship Review Committee, Spring 2001.

Cross-Campus Initiatives Retreat: Positioning the Campus for the Future. Feb. 27, 2002.

College of ACES Committee on UIUC Farms Waste Handling, Fall 1998-Spring 2000.

CNRS-UIUC workshop, Environmental Biotechnology at the University of Illinois, Paris, France, Sept. 9-10, 1997.

Interview Committee for FIPSE (Funding Improvement of Post Secondary Education) program to select UIUC awardees (International Programs and Studies), Spring 1994.