CURRICULUM VITAE

Amy Rebecca Sapkota, Ph.D., M.P.H.

Notarization: I have read the following and certify that this *curriculum vitae* is a current and accurate statement of my professional record.

Signature: Augspeter Date: 8/8/23

Personal Information

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Education

- 2005 Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD Doctor of Philosophy in Environmental Health Sciences Howard Hughes Medical Institute Pre-Doctoral Fellow in Biological Sciences, 2001-2005 Certificate in Risk Sciences and Public Policy, 2002 Advisor: Kellogg J. Schwab, PhD, MS
- 1999 Yale University School of Public Health, New Haven, CT Master of Public Health in Environmental Health Sciences
- 1997 University of Maryland, College Park, College Park, MD Bachelor of Science in Biology Phi Beta Kappa, summa cum laude

Post-doctoral Training

- 2005- École Centrale de Lyon, Environmental Microbial Genomics Group, Laboratoire Ampère
- 2007 Le Centre National de la Recherche Scientifique, Lyon, France Advisor: Timothy M. Vogel, PhD, MS
- 2005 **Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD** Department of Environmental Health Sciences, Center for Water and Health

Employment Background

1/23-Present Director, Maryland Institute for Applied Environmental Health, University of Maryland School of Public Health

1/23-Present	MPower Professor University of Maryland Strategic Partnership: MPowering the State <u>https://mpower.maryland.edu/</u>
9/18-Present	Director UMD Global STEWARDS National Science Foundation Research Traineeship (NSF NRT) University of Maryland School of Public Health College Park, MD
5/18-Present	Professor University of Maryland School of Public Health Maryland Institute for Applied Environmental Health Department of Epidemiology and Biostatistics College Park, MD Secondary appointment, University of Maryland Baltimore, School of Medicine, Department of Epidemiology and Public Health, Baltimore, MD
3/16-Present	Director CONSERVE: A Center of Excellence at the Nexus of Sustainable Water Reuse, Food and Health University of Maryland School of Public Health College Park, MD
8/13-5/18	Associate Professor University of Maryland School of Public Health Maryland Institute for Applied Environmental Health Department of Epidemiology and Biostatistics College Park, MD
1/09-Present	Affiliate Faculty University of Maryland Marine Estuarine Environmental Sciences Graduate Program College Park, MD
1/09-Present	Affiliate Faculty University of Maryland Center for Food Safety and Security Systems College Park, MD
6/07-8/13	Assistant Professor University of Maryland School of Public Health Maryland Institute for Applied Environmental Health Affiliate, Department of Epidemiology and Biostatistics College Park, MD
11/05-6/07	Post-doctoral Fellow École Centrale de Lyon Laboratoire Ampère, Environmental Microbial Genomics Group Le Centre National de la Recherche Scientifique Lyon, France
9/01-11/06	Research Director (Part-time) Center for a Livable Future, Industrial Animal Production Project

Johns Hopkins University Bloomberg School of Public Health Baltimore, MD

4/05-11/05	Post-doctoral Fellow Johns Hopkins University Bloomberg School of Public Health Department of Environmental Health Sciences, Center for Water and Health Baltimore, MD
9/01-4/05	Howard Hughes Medical Institute Pre-Doctoral Fellow in Biological Sciences Johns Hopkins University Bloomberg School of Public Health Department of Environmental Health Sciences, Center for Water and Health Baltimore, MD
9/99-9/01	Environmental Epidemiologist and Acting Director Maryland Department of Health and Mental Hygiene Office of Environmental Health Coordination Baltimore, MD
6/98-9/98	National Network for Environmental Management Studies (NNEMS) Fellow U.S. Environmental Protection Agency (EPA) Office of Resource and Development, Office of International Activities Washington, D.C.

Publications (Chapin is my maiden name; †denotes corresponding author; § denotes shared first or senior authorship; #denotes advised undergraduate students; *denotes advised graduate students; **denotes advised post-doctoral students)

Publication Statistics: According to Google Scholar, as of 8/8/23, my published, peer-reviewed papers have been cited over 5,026 times (Average of 53 citations per article; Range, 0-915). My overall **h-index is 34** and my overall **i10-index is 68**.

Articles Published or In Press in Peer-reviewed Journals

- Hathcock AL, Nace C, Johnson D, Quimbo R, Venezia R, Chapin A, Cline JS, Buckheit K, Webb P, Ball R, Scruggs N, Jenkins S, Peipins LA, Monti M, Brooks M. 2000. Surveillance for possible estuaryassociated syndrome—six states, 1998-1999. *Morbidity and Mortality Weekly Report* 49, 372-373. <u>Contribution of Amy R. Sapkota</u>: Generated and provided surveillance data for the State of Maryland; and edited the manuscript.
- Chapin AR, Carpenter CM, Dudley WC, Gibson LC, Pratdesaba R, Torres O, Sanchez D, Belkind-Gerson J, Nyquist I, Karnell A, Gustafsson B, Halpern JL, Bourgeois AL, Schwab KJ.⁺ 2005. Prevalence of Norovirus among United States visitors to Mexico and Guatemala who experience traveler's diarrhea. *Journal of Clinical Microbiology* 43, 1112-1117. <u>Contribution of Amy R. Sapkota</u>: Performed all laboratory analyses and wrote the entire manuscript.
- 3. **Chapin A**, Rule A, Gibson K, Buckley T, Schwab K.⁺ 2005. Airborne multi-drug resistant bacteria isolated from a concentrated swine feeding operation. *Environmental Health Perspectives* 113, 137-145.

<u>Secondary Write-up</u>: This article was selected by the journal, *Environmental Health Perspectives*, as one of their Environews Science Selections:

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1277892/)

<u>Contribution of Amy R. Sapkota</u>: Developed study idea; designed sampling strategy; performed all field sampling trips and laboratory analyses; and wrote the entire manuscript.

- 4. Wu HM⁺, Fornek M, Schwab KJ, Chapin AR, Gibson KE, Schwab E, Spencer C, Henning K. 2005. A Norovirus outbreak at a long-term-care facility: the role of environmental surface contamination. *Infection Control and Hospital Epidemiology* 26, 802-810. <u>Contribution of Amy R. Sapkota:</u> Performed norovirus detection methods on stool, vomitus, and environmental surface samples; and contributed to the methods section of the manuscript.
- Rule AM, Chapin AR, McCarthy S, Gibson KE, Schwab KJ, Buckley TJ.[†] 2005. Assessment of an aerosol treatment to improve air quality in a swine concentrated animal feeding operation (CAFO). *Environmental Science & Technology* 39, 9649-9655. <u>Contribution of Amy R. Sapkota:</u> Performed laboratory analyses; and contributed to the methods and discussion section of the manuscript.
- Sapkota AR, Price LB, Silbergeld EK, Schwab KJ.⁺ 2006. Arsenic resistance in *Campylobacter* spp. isolated from retail poultry products. *Applied and Environmental Microbiology* 72, 3069-3071. <u>Contribution of Amy R. Sapkota</u>: Developed study idea; designed and performed all laboratory analyses; and wrote the entire manuscript.
- 7. **Sapkota AR,** Ojo KK, Roberts MC, Schwab KJ.⁺ 2006. Antibiotic resistance genes in multidrugresistant *Enterococcus* spp. and *Streptococcus* spp. recovered from the indoor air of a concentrated swine feeding operation. *Letters in Applied Microbiology* 43, 534-540
- 8. <u>Contribution of Amy R. Sapkota</u>: Developed study idea; designed and performed all laboratory analyses; and wrote the entire manuscript.
- Sapkota AR[†], Lefferts LY, McKenzie S, Walker P. 2007. What do we feed to food production animals? A review of animal feed ingredients and their potential impacts on human health. *Environmental Health Perspectives* 115, 663-670. <u>Contribution of Amy R. Sapkota</u>: Performed literature review; and wrote the entire manuscript.

Served as the corresponding author.

- Sapkota AR⁺, Curriero FC, Gibson KE, Schwab KJ. 2007. Antibiotic-resistant enterococci and fecal indicators in surface waters and groundwater impacted by a concentrated swine feeding operation. *Environmental Health Perspectives* 115, 1040-1045. <u>Contribution of Amy R. Sapkota:</u> Developed study idea; designed sampling strategy; performed all field sampling trips and laboratory analyses; and wrote the entire manuscript. Served as the corresponding author.
- 11. Ojo KK, **Sapkota AR.†** 2007. Self-prescribed use of antimicrobials during menstrual periods: A disturbing new example of information poverty in Nigeria. *Journal of Infection in Developing Countries* 1, 123-124.

<u>Contribution of Amy R. Sapkota:</u> Performed literature review and preliminary analyses; co-wrote the entire manuscript. Served as the corresponding author.

- 12. David MM*, **Sapkota AR**, Simonet P, Vogel, TM.⁺ 2008. A novel and rapid method for synthesizing positive controls and standards for quantitative PCR. *Journal of Microbiological Methods* 73, 73-77. <u>Contribution of Amy R. Sapkota</u>: Assisted with laboratory analyses; and wrote a significant portion of the manuscript.
- Sapkota A⁺, Sapkota AR, Kucharski M, Burke J, McKenzie S, Walker P, Lawrence R. 2008. Aquaculture practices and potential human health risks: Current knowledge and future priorities. Environment International 34, 1215-26.

<u>Contribution of Amy R. Sapkota</u>: Performed literature review; and wrote significant portions of the manuscript.

- Ojo KK⁺, Sapkota AR, Pottinger PS, Ojo TB. 2008. Antimicrobial resistance gene distribution: A socioeconomic and sociocultural perspective. *German Medical Science* 3, 1-6.
 <u>Contribution of Amy R. Sapkota:</u> Contributed to manuscript idea; and wrote significant portions of this manuscript.
- 15. Sapkota AR⁺, Berger S, Vogel, TM. 2010. Human pathogens abundant in the bacterial metagenome of cigarettes. *Environmental Health Perspectives* 118, 351-6. <u>Contribution of Amy R. Sapkota</u>: Developed study idea; designed sampling strategy; performed the majority of the laboratory analyses; performed the majority of the statistical analyses; and wrote the entire manuscript. Served as the corresponding author.
- Nemir A[#], David MM^{*}, Perrussel R, Sapkota A, Simonet P, Monier J, Vogel TM.[†] 2010. Comparative phylogenetic microarray analysis of microbial communities in TCE-contaminated soils. 2010. *Chemosphere* 80(5):600-7. Contribution of Amy R. Sapkota: Performed laboratory analyses; and edited the manuscript.
- 17. **Sapkota AR**⁺, Coker ME, Rosenberg Goldstein RE^{*}, Atkinson, NL, Sweet SJ^{*}, Sopeju PO, Ojo MT, Otivhia E, Ayepola OO, Olajuyigbe OO, Shireman L, Pottinger PS, Ojo KK. 2010. Self-medication with antibiotics for the treatment of menstrual symptoms in Southwest Nigeria: a cross-sectional study. *BMC Public Health* 10:610.

<u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed sampling strategy; supervised data collection and data input; led and performed the data analysis; and wrote the entire manuscript. Served as the corresponding author.

18. Sapkota AR⁺, Hulet RM, Zhang G, McDermott P, Kinney EL^{*}, Schwab KJ, Joseph SW. 2011. Lower prevalence of antibiotic-resistant enterococci on U.S. conventional poultry farms that transitioned to organic practices. *Environmental Health Perspectives* 119(11):1622-8. <u>Secondary Write-up:</u> This article was selected by the journal, *Environmental Health Perspectives* as one of their Science Selections: <u>http://ehp03.niehs.nih.gov/article/fetchArticle.action?articleURI=info%3Adoi%2F10.1289%2Fehp.11</u> 9-a489b)

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed sampling strategy; supervised data collection and laboratory analysis; assisted in the statistical analysis; and wrote the entire manuscript. Served as the corresponding author.

- 19. Micallef SA**, Rosenberg Goldstein RE*, George A#, Kleinfelter L#, Boyer MS, McLaughlin CR, Ewing L, Jean-Gilles Beaubrun J, Hanes DE, Kothary MH, Razeq JH, Joseph SW, Sapkota AR⁺. 2012. Occurrence and antibiotic resistance of multiple Salmonella serotypes recovered from water, sediment and soil on Mid-Atlantic tomato farms. Environmental Research 114:31-9. Contribution of Amy R. Sapkota: Conceived study idea; designed sampling strategy; supervised data collection and laboratory analysis; wrote major portions of the manuscript. Served as the corresponding author.
- 20. Jean-Gilles Beaubrun J, Cheng C, Chen K, Ewing L, Wang H, Agpaoa MC, Huang MJ, Dickey E, Du JM, Williams-Hill DM, Hamilton B, Micallef SA**, Rosenberg Goldstein RE*, George A[#], Joseph SW, Sapkota AR, Jacobson AP, Tall BD, Kothary MH, Dudley K and Hanes DE. 2012. The evaluation of a PCR-based method for identification of *Salmonella enterica* serotypes from environmental samples and various food matrices. *Food Microbiology*. 31(2):199-209. <u>Contribution of Amy R. Sapkota</u>: Provided the environmental *Salmonella* isolates; assisted in the study design; and contributed to the manuscript.
- 21. Rosenberg Goldstein RE*, Micallef SA**, Gibbs SG, Davis JA, He X, George A[#], Kleinfelter LM[#], Schreiber NA[#], Mukherjee S, Sapkota A, Joseph SW, and **Sapkota AR⁺**. 2012. Methicillin-resistant

Staphylococcus aureus detected at four U.S. wastewater treatment plants. *Environmental Health Perspectives* 120:1551–1558.

<u>Secondary Write-up</u>: This article was selected by the journal, *Environmental Health Perspectives* as one of their Science Selections: <u>https://ehp.niehs.nih.gov/120-a437a/</u>

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed sampling strategy; supervised data collection, laboratory analysis and statistical analysis; wrote major portions of the manuscript. Served as the corresponding author.

22. Pasturel BZ*, Cruz-Cano R, Rosenberg Goldstein RE*, Palmer A, Blythe D, Ryan P, Hogan B, Jung C, Joseph SW, Wang MQ, Ting Lee ML, Puett R, and **Sapkota AR**⁺. 2013. Rurality, presence of broiler operations and community socioeconomic factors influence the risk of campylobacteriosis in Maryland. *American Journal of Public Health* 103(12):2267-75. Contribution of Amy R. Sapkota: Conceived study idea; designed study; supervised data collection

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.

- 23. Micallef SA**, Rosenberg Goldstein RE*, George A[#], Ewing L, Tall BD, Boyer MS, Joseph SW, and Sapkota AR⁺. 2013. Diversity, distribution and antibiotic resistance of *Enterococcus* spp. recovered from tomatoes, leaves, water and soil on U.S. Mid-Atlantic farms. *Food Microbiology* 36:465-474. Contribution of Amy R. Sapkota: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.
- Rosenberg Goldstein RE*, Micallef SA**, Gibbs SG, George A#, Claye E, Sapkota A, Joseph SW, and Sapkota AR⁺. 2014. Detection of vancomycin-resistant enterococci (VRE) at four U.S. wastewater treatment plants that provide effluent for reuse. *Science of the Total Environment* 1;466-467C:404-411. doi: 10.1016/j.scitotenv.2013.07.039.

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.

25. **Sapkota AR**⁺, Kinney EL^{*}, George A[#], Hulet RM, Cruz-Cano R, Schwab KJ, Zhang G, Joseph SW. 2014. Lower prevalence of antibiotic-resistant *Salmonella* on large-scale U.S. conventional poultry farms that transitioned to organic practices. *Science of the Total Environment* 1;476-477:387-92. doi: 10.1016/j.scitotenv.2013.12.005.

<u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote the entire manuscript. Served as the corresponding author.

26. Shaw KS*⁺, Rosenberg Goldstein RE^{*}, He X, Jacobs JM, Crump BC, Sapkota AR. 2014. Antimicrobial susceptibility of *Vibrio vulnificus* and *Vibrio parahaemolyticus* recovered from recreational and commercial areas of the Chesapeake Bay and Maryland Coastal Bays. *PLoS One* 9(2):e89616. doi: 10.1371/journal.pone.0089616.

<u>Contribution of Amy R. Sapkota</u>: Directed the antimicrobial susceptibility testing; and wrote major portions of the manuscript. Served as the senior author.

 Rosenberg Goldstein RE*, Micallef SA**, Gibbs SG, He X, George A#, Sapkota A, Joseph SW, and Sapkota AR⁺. 2014. Occupational exposure to *Staphylococcus aureus* and *Enterococcus spp.* among spray irrigation workers using reclaimed water. *International Journal of Environmental Research and Public Health* 11(4), 4340-4355; doi:10.3390/ijerph110404340.

<u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.

Hosgood HD^{+§}, Sapkota AR[§], Rothman N, Rohan T, Wei H, , Xu J, Vermeulen R, He X, White JR, Wu G, Wei F, Mongodin EF, and Lan, Q. 2014. The potential role of lung microbiota in lung cancer attributed to household coal burning exposures. *Environmental and Molecular Mutagenesis*. 55(8):643-51. doi: 10.1002/em.21878
 Contribution of Amy P. Sankota: Completed DNA extractions: facilitated 165 rBNA sequencing:

<u>Contribution of Amy R. Sapkota:</u> Completed DNA extractions; facilitated 16S rRNA sequencing; assisted in data analysis; and wrote significant portions of the manuscript. Served as co-first author.

- Shaw KS*⁺, Sapkota AR, Jacobs JM, Crump BC. 2015. Recreational swimmers' exposure to Vibrio vulnificus and Vibrio parahaemolyticus in the Chesapeake Bay, Maryland, USA. Environment International 74:99-105. doi: 10.1016/j.envint.2014.09.016.
 <u>Contribution of Amy R. Sapkota:</u> Assisted in the study design; revised and wrote major portions of the manuscript.
- Jiang C[§], Shaw KS**[§], Upperman CR*, Blythe D, Mitchell C, Murtugudde R, Sapkota AR[§], Sapkota A^{§,†}.
 2015. Climate change, extreme events and increased risk of salmonellosis: Evidence for coastal vulnerability. *Environment International*. 83:58-62. doi: 10.1016/j.envint.2015.06.006.
 <u>Contribution of Amy R. Sapkota:</u> Assisted in the study design; revised and wrote major portions of the manuscript. Served as co-senior author.
- 31. Carey SA*, Rosenberg Goldstein RE**, Gibbs SG, Claye E, He, X, Sapkota AR⁺. 2016. Occurrence of vancomycin-resistant and –susceptible *Enterococcus* spp. in reclaimed water used for spray irrigation. *Environmental Research.* 147:350-355. doi: 10.1016/j.envres.2016.02.030. <u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.
- 32. Soneja S**, Jiang C, Upperman CR, Murtugudde R, Mitchell C, Blythe D, Sapkota AR[§], Sapkota A^{§,†}. 2016. Extreme precipitation events and increased risk of campylobacteriosis in Maryland, U.S.A. *Environmental Research*. 149:216-221. doi: 10.1016/j.envres.2016.05.021. Contribution of Amy R. Sapkota: Assisted in the study design; and contributed to major portions of the manuscript. Served as co-senior author.
- 33. Shaw KS**, Cruz-Cano R, Jiang C, Malayil L, Palmer A, Blythe D, Ryan P, Sapkota AR⁺. 2016. Presence of animal feeding operations and community socioeconomic factors impact salmonellosis incidence rates: Foodborne diseases active surveillance network (FoodNet), 2004-2010. Environmental Research. 150:166-172. doi: 10.1016/j.envres.2016.05.049. Contribution of Amy R. Sapkota: Conceived study idea; designed study; supervised data collection and statistical analysis; and re-wrote the manuscript. Served as the corresponding author.
- 34. Rosenberg Goldstein RE**, Cruz-Cano R, Jiang C, Palmer A, Blythe D, Ryan P, Hogan B, White B, Dunn JR, Libby T, Tobin-D'Angelo M, Huang J, McGuire S, Scherzinger K, Lee MLT, Sapkota AR⁺. 2016. Association between community socioeconomic factors, animal feeding operations and Campylobacteriosis incidence rates: Foodborne diseases active surveillance network (FoodNet), 2004-2010. BMC Infectious Diseases. 16:354. doi: 10.1186/s12879-016-1686-9. Contribution of Amy R. Sapkota: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.
- 35. Chopyk J*, Chattopadhyay S*, Kulkarni P*, Claye E*, Babik KR*, Reid MC*, Smyth EM**, Hittle LE, Paulson JN, Cruz-Cano R, Pop M, Clark PI, Sapkota AR[§], Mongodin EF^{§,†}. 2017. Mentholation affects the cigarette microbiota by selecting for bacteria resistant to harsh environmental conditions and selecting against potential bacterial pathogens. *Microbiome*. 15;5(1):22. doi: 10.1186/s40168-017-0235-0.

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed study; supervised experiments and laboratory analyses; and revised the manuscript. Served as co-senior author.

- 36. Chopyk J*, Chattopadhyay S, Kulkarni P*, Smyth EM**, Hittle LE, Paulson JN, Pop M, Clark PI, Mongodin EF[§], Sapkota AR^{§,†}. 2017. Temporal variations in cigarette tobacco bacterial community composition and tobacco-specific nitrosamine content are influenced by brand and storage conditions. *Frontiers in Microbiology*. 7(8):358. doi: 10.3389/fmicb.2017.00358. Contribution of Amy R. Sapkota: Conceived study idea; designed study; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.
- Boyle M*, Soneja S**, Quiros-Alcala L, Dalemarre L, Sapkota AR, Sangaramoorthy T, Wilson S, Milton D, Sapkota A. 2017. A pilot study to assess residential noise exposure near natural gas compressor stations. 2017. *PLoSOne*. 12(4): e0174310. doi: 10.1371/journal.pone.0174310.
 <u>Contribution of Amy R. Sapkota:</u> Assisted in study design and analysis; and revised the manuscript.
- 38. Rosenberg Goldstein RE**+, Kleinfelter L*, He X, Micallef SA, George A, Gibbs SG, Sapkota AR. 2017. Higher prevalence of coagulase-negative staphylococci carriage among reclaimed water spray irrigators. Science of the Total Environment. 595(1):35-40. doi: 10.1016/j.scitotenv.2017.03.174. <u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.
- 39. Smyth EM**, Kulkarni P*, Claye E*, Stanfill S, Tyx R, Mongodin EF, Sapkota AR⁺. 2017. Smokeless tobacco products harbor diverse bacterial communities that differ across products and brands. *Applied Microbiology and Biotechnology*. Jul;101(13):5391-5403. doi: 10.1007/s00253-017-8282-9. <u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.
- Kulkarni P*, Olson N*, Raspanti G*, Rosenberg Goldstein R**, Gibbs SG, Sapkota A, Sapkota AR[†].
 2017. Antibiotic concentrations decrease during wastewater treatment but persist at low levels in reclaimed water. *International Journal of Environmental Research and Public Health*. doi: 10.3390/ijerph14060668. Jun 21;14(6).

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.

- Huang JY, Patrick ME, Manners J, Sapkota AR, Scherzinger KJ, Tobin-D'Angelo M, Henao OL, Cole DJ, Vieira AR. 2017. Association between wetland presence and incidence of *Salmonella enterica* serotype Javiana infections in selected US sites, 2005-2011. *Epidemiology and Infection*, 145(14):2991-2997. doi: 10.1017/S0950268817001790. Contribution of Amy R. Sapkota: Assisted in study design and analysis; and revised the manuscript.
- 42. Chopyk J*, Allard S**, Nasko DJ**, Bui A[#], Mongodin EF, Sapkota AR. 2018. Agricultural freshwater pond supports diverse and dynamic bacterial and viral populations. *Frontiers in Microbiology, 9: 792.* doi: 10.3389/fmicb.2018.00792.
 <u>Contribution of Amy R. Sapkota:</u> Conceived study idea; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.
- 43. Kulkarni P**, Olson ND*, Paulson JN, Pop M, Maddox C, Claye E, Rosenberg Goldstein RE, Sharma M, Gibbs SG, Mongodin EF, Sapkota AR⁺. 2018. Conventional wastewater treatment and reuse site practices modify bacterial community structure but do not eliminate some opportunistic pathogens in reclaimed water. *Science of the Total Environment*, 639:1126–1137. doi: 10.1016/j.scitotenv.2018.05.178.

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.

 Murray R*, Rosenberg Goldstein RE, Maring E, Pee D, Aspinwall K, Wilson S, Sapkota AR⁺. 2018. Prevalence of microbiological and chemical contaminants in private drinking water wells in Maryland, USA. *International Journal of Environmental Research and Public Health*, 15, 1686. doi: 10.3390/ijerph15081686.

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.

- 45. Sapkota AR⁺. 2019. Water reuse, food production and public health: Adopting transdisciplinary, systems-based approaches to achieve water and food security in a changing climate. *Environmental Research*, 171, 576-580. doi: 10.1016/j.envres.2018.11.003. Contribution of Amy R. Sapkota: Conceived manuscript idea; wrote the manuscript. Served as the corresponding author.
- 46. Zhu L*, Torres M, Betancourt WQ, Sharma M, Micallef SA, Gerba C, **Sapkota AR**, Sapkota A, Parveen S, Hashem F, May E, Kniel-Tolbert KE, Pop M, Ravishankar S. 2019. Incidence of fecal indicator and pathogenic bacteria in reclaimed and return flow waters in Arizona, USA. *Environmental Research*, 170, 122-127. doi: 10.1016/j.envres.2018.11.048.

<u>Contribution of Amy R. Sapkota:</u> Assisted in the study design; and contributed to major portions of the manuscript.

 Chattopadhyay S*, Smyth EM**, Prachi Kulkarni*, Kelsey R. Babik*, Molly Reid*, Hittle LE, Clark P, Mongodin EF, Sapkota AR⁺. 2019. Little cigars and cigarillos harbor diverse bacterial communities that differ between the tobacco and the wrapper. *PLoSONE*, 14(2):e0211705. doi: 10.1371/journal.pone.0211705.

<u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised experiments and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.

Kulkarni P*, Raspanti GA**, Bui AQ[#], Bradshaw RN*, Kniel K, Chiu P, Sharma M, Sapkota A, Sapkota AR[†]. 2019. Zerovalent iron-sand filtration can reduce the concentration of multiple antimicrobials in conventionally treated reclaimed water. *Environmental Research*, 172, 301-309. doi: 10.1016/j.envres.2019.02.012.

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed study; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.

- 49. Allard SM**, Callahan MT, Bui A[#], Ferelli A*, Chopyk J*, Chattopadhyay S*, Mongodin EF, Micallef SA, Sapkota AR⁺. 2019. Creek to Table: Tracking fecal indicator bacteria, bacterial pathogens, and total bacterial communities from irrigation water to kale and radish crops. *Science of the Total Environment*, 666, 461-471. doi: 10.1016/j.scitotenv.2019.02.179. Contribution of Amy R. Sapkota: Conceived study idea; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.
- 50. Allard S**, Solaiman S*, Callahan MT*, Bui A*, Kelbick HC*, Haymaker J*, Foust D*, Duncan R*, Smyth E**, Mongodin EF, Hashem F, Micallef S, Sapkota AR⁺. 2019. Quenching by sodium thiosulfate does not influence 16S rRNA gene sequencing profiles of reclaimed water from three sites in the Mid-Atlantic, United States. *Environmental Research*, 172:296-300. doi: 10.1016/j.envres.2019.02.022.

<u>Contribution of Amy R. Sapkota</u>: Conceived study idea; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.

51. Haymaker J*, Sharma M⁺, Parveen S, Hashem F, May E, Handy E, White C, East C, Bradshaw R*, Micallef SA, Callahan MT, Allard SM**, Anderson B*, Craighead S*, Gartley S*, Vanore A*, Kniel KE, Solaiman S*, Bui A, Murray R*, Craddock HA*, Kulkarni P**, Foust D*, Duncan R*, Taabodi M, and Sapkota AR. 2019. Prevalence of Shiga toxin-producing and atypical enteropathogenic *Escherichia coli* in untreated surface water and reclaimed water in the Mid-Atlantic U.S. *Environmental Research*, 172:630-636. doi: 10.1016/j.envres.2019.02.019.

<u>Contribution of Amy R. Sapkota:</u> Conceived study idea; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.

- 52. Hosgood D, Mongodin EF, Wan Y, Hua X, Rothman N, Hu W, Vermeulen R, Seow WJ, Rohan T, Xu J, Li J, He J, Huang Y, Yang K, Wu G, Wei F, Shi J, **Sapkota AR**, Lan Q⁺. 2019. The respiratory tract microbiome and its relationship to lung cancer and environmental exposures found in rural China. *Environmental and Molecular Mutagenesis*, 60(7):617-623. doi: 10.1002/em.22291. Contribution of Amy R. Sapkota: Assisted in study design and analysis; and revised the manuscript.
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- 55. Smyth EM**, Chattopadhyay S, Chopyk J*, Malayil L*, Kulkarni P**, Hittle LE**, Clark PI, **Sapkota AR** Mongodin EF⁺. 2019. The bacterial communities of little cigars and cigarillos are dynamic over time and varying storage conditions. *Frontiers in Microbiology*, 10: 2371. doi: <u>10.3389/fmicb.2019.02371</u> <u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised experiments and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.
- 56. Craddock HA*, Panthi S*, Rjoub Y, Lipchin C, Sapkota A, Sapkota AR⁺. 2020. Antibiotic and herbicide concentrations in household greywater reuse systems and pond water used for food crop irrigation: West Bank, Palestinian Territories. Science of the Total Environment, 699:134205. doi: <u>10.1016/j.scitotenv.2019.134205</u> Contribution of Amy R. Sapkota: Conceived study idea; designed study; supervised experiments and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.
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- 59. Sharma M⁺, Handy ET, East CL, Kim S^{**}, Jiang C, Callahan MT, Allard SM^{**}, Micallef SA, Craighead SA^{*}, Anderson-Coughlin B^{*}, Gartley S^{*}, Vanore A^{*}, Kniel KE, Haymaker JR^{*}, Duncan R^{*}, Foust D^{*}, White C^{*}, Taabodi M, Hashem F, Parveen S, May EB, Bui A, Craddock H, Kulkarni P, Murray RT^{**}, **Sapkota AR.** 2020. Prevalence of *Salmonella* and *Listeria monocytogenes* in non-traditional irrigation waters in the Mid-Atlantic United States is affected by water type, season, and recovery method. *PLOS One* 17;15(3):e0229365. doi: 10.1371/journal.pone.0229365. Contribution of Amy R. Sapkota: Conceived study idea; supervised experiments and laboratory analyses; and revised the manuscript.
- 60. Malayil L*, Chattopadhyay S*, Kulkarni P**, Hittle L, Clark PI, Mongodin EF[§], Sapkota AR^{§,†}. 2020. Mentholation triggers brand-specific shifts in the bacterial microbiota of commercial cigarette products. *Applied Microbiology and Biotechnology*. 104; 6287–6297. doi: 10.1007/s00253-020-10681-1 Contribution of Amy R. Sankota: Conceived study idea: designed study: supervised experiments and study: supervised experiments and study: supervised experiments.

<u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised experiments and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.

- 61. Murray R**, Cruz-Cano R, Nasko D**, Blythe D, Ryan P, Boyle M, Wilson S, Sapkota AR⁺. 2020. Association between Private Drinking Water Wells and the Incidence of Campylobacteriosis in Maryland: An Ecological Analysis Using Foodborne Diseases Active Surveillance Network (FoodNet) Data (2007-2016). *Environmental Research*. 188:109773 doi: 10.1016/j.envres.2020.109773 <u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised experiments and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.
- 62. Craddock HA*, Chattopadhyay S**, Rjoub Y, Rosen D, Grief J, Lipchin C, Mongodin EF, Sapkota AR⁺. 2020. Antibiotic-resistant *Escherichia coli* and *Klebsiella* spp. in greywater reuse systems and pond water used for agricultural irrigation in the West Bank, Palestinian Territories. *Environmental Research*. 188:109777. doi: 10.1016/j.envres.2020.109777. <u>Contribution of Amy R. Sapkota:</u> Conceived study idea; designed study; supervised experiments and statistical analysis; and wrote major portions of the manuscript. Served as the corresponding author.
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- Malayil L**, Ramachandran P, Chattopadhyay S*, Cagle R[#], Hittle L, Ottesen A, Mongodin EF, Sapkota AR⁺. 2020. Metabolically-active bacteria in reclaimed water and ponds revealed using bromodeoxyuridine DNA labeling coupled with 16S rRNA and shotgun sequencing. *Water Research*. 184;116185.

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- 72. Malayil L**, Negahban-Azar M, Rosenberg Goldstein R, Sharma M, Gleason J, Muise A, Murray R, Sapkota AR⁺. 2021. "Zoom"ing our way through virtual undergraduate research training: A successful redesign of the CONSERVE Summer Internship Program. *Journal of Microbiology and Biology Education*. 22(1):22.1.90. doi: 10.1128/jmbe.v22i1.2625. Contribution of Amy R. Sapkota: Contributed to writing the manuscript; modified the figures; and revised the manuscript. Served as the corresponding author.
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water source on the Eastern Shore of Maryland. *Microbiology Spectrum*. 9(2):e0066921. doi: 10.1128/Spectrum.00669-21.

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and revised the manuscript.

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 Contribution of Amy P. Sankota: Conscisued the study idea: designed the study supervised sample.

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 <u>Contribution of Amy R. Sapkota</u>: Conceived the study idea; designed the study; supervised sample collection and revised the manuscript.

87. Malayil L**, Chattopadhyay S*, Bui A*, Panse M*, Cagle R*, Mongodin EF, Sapkota AR⁺. 2022. Viable bacteria abundant in cigarettes are aerosolized in mainstream smoke. *Environmental Research*. 212, Part D, 113462. doi: 10.1016/j.envres.2022.113462 <u>Contribution of Amy R. Sapkota:</u> Conceived the study idea; designed the study; supervised the experiments and data analysis; and wrote significant portions of the manuscript. Served as the corresponding author.

- 88. Morgado M*, Hudson CL, Chattopadhyay S*, Ta K[#], East C, Purser N, Allard S**, Ferrier MD, Sapkota AR, Sharma M, Rosenberg Goldstein R⁺. 2022. The effect of a first-flush rainwater harvesting and subsurface irrigation system on *E. coli* and pathogen concentrations in irrigation water, soil, and produce. *Science of the Total Environment*. 843, 15;156976. doi: 10.1016/j.scitotenv.2022.156976 Contribution of Amy R. Sapkota: Contributed to the study design; supported the data analysis and interpretation; and revised the manuscript.
- 89. Kim S**, Paul M*, Negahban-Azar M, Micallef SA, Rosenberg Goldstein R, Hashem F, Parveen S, Sapkota A, Kniel KE, Sapkota AR, Pachepsky Y⁺, Sharma M. 2022. Persistent spatial patterns of *Listeria monocytogenes* and *Salmonella enterica* concentrations in surface waters: EOF analysis of data from Maryland and Delaware. *Applied Sciences*. 12(15), 7526; doi.org/10.3390/app12157526 <u>Contribution of Amy R. Sapkota:</u> Contributed to the study design; supported the data analysis and interpretation; and revised the manuscript.
- 90. Malayil L**⁺, Chattopadhyay S*, Mongodin EF, Sapkota AR. 2022. Bacterial communities of hookah tobacco products are diverse and differ across brands and flavors. Applied Microbiology and Biotechnology. 106, 5785–5795. doi.org/10.1007/s00253-022-12079-7 Contribution of Amy R. Sapkota: Conceived the study idea; designed the study; supervised experiments and statistical analysis; and revised the manuscript. Served as the corresponding author.
- 91. Malayil L**, Ramachandran P, Chattopadhyay S*, Allard SM**, Bui A#, Butron J#, Callahan MT, Craddock H*, Murray R**, East C, Sharma M, Kniel K, Micallef S, Hashem F, Gerba C, Ravishankar S, Parveen S, May E, Sapkota A, Pop M, Handy E, Kulkarni P, Anderson B*, Craighead S*, Gartley S*, Vanore A*, Duncan R*, Foust D*, Haymaker J*, Betancourt W, Zhu L, Mongodin EF, **Sapkota AR**[†]. 2022. Variations in bacterial diversity and antibiotic resistance genes across diverse recycled irrigation water sources in the Mid-Atlantic and Southwest United States: A CONSERVE two-year field study. *Environmental Science & Technology*. 56, 21, 15019–15033. doi.org/10.1021/acs.est.2c02281

<u>Contribution of Amy R. Sapkota</u>: Conceived the study idea; designed the study; supervised sample collection, experiments and statistical analysis; and revised the manuscript. Served as the corresponding author.

- 92. Chattopadhyay S*⁺, Ramachandran P, Malayil L**, Mongodin EF, Sapkota AR. Conventional tobacco products harbor unique and heterogeneous microbiomes. 2023. Environmental Research. 1;220:115205. doi: 10.1016/j.envres.2022.115205. Contribution of Amy R. Sapkota: Conceived the study idea; designed the study; supervised experiments and statistical analysis; and revised the manuscript. Served as the corresponding author.
- 93. Kim S, Micallef SA, Rosenberg Goldstein R, Sapkota AR, Parveen S, Hashem F, Kniel K, Sharma M, Pachepsky Y. Temporal stability of Salmonella enterica and Listeria monocytogenes in surface waters used for irrigation in the Mid-Atlantic United States. 2023. *Journal of Food Protection*. 86(4):100058. doi: 10.1016/j.jfp.2023.100058.

<u>Contribution of Amy R. Sapkota:</u> Contributed to the study design; supported the data analysis and interpretation; and revised the manuscript.

94. Zhu L*, Chattopadhyay S, Akanbi QE, Lobo S, Panthi S, Malayil L, Craddock H, Allard SM, Sharma M, Kniel KE, Mongodin EF, Chiu PC, Sapkota A, **Sapkota AR.** 2023. Biochar and zero-valent iron sand filtration simultaneously removes contaminants of emerging concern and Escherichia coli from wastewater effluent. *Biochar* [In Press].

95. Chattopadhyay S*⁺, Malayil L*^{*}, Syeda Kaukab, Zachary Merenstein, **Sapkota AR**. 2023. The predisposition of smokers to COVID-19 infection: A mini-review of global perspectives. *Heliyon* [In press].

Articles Submitted to Peer-reviewed Journals

- 96. Murray R, Marbach-Ad G, McKee K, Winner ME, Lansing S, **Sapkota AR**. A curricular model to train doctoral students in interdisciplinary research at the food-energy-water nexus. [Revisions under review].
- 97. Chattopadhyay S*, Malayil L**, Chopyk J*, Smyth E**, Kulkarni P*, Raspanti G*, Thomas SB, Sapkota A, Mongodin E, **Sapkota AR**⁺. Oral microbiome dysbiosis among cigarette smokers and smokeless tobacco users compared to non-users. [Under Review].
- 98. Panthi S, **Sapkota AR**, Movahed Z, Mohaved Z, Turner PC, Nguyen QC, Sapkota A. Advanced membrane-based purification facility removes contaminants of emerging concern: A pilot indirect potable reuse case study, Maryland, USA. [Under Review].
- 99. Panthi S, **Sapkota AR**, Movahed Z, Movahed B, Turner PC, Nguyen QC, Malayil L, Sapkota A. Advanced membrane-based water purification facility removes per- and polyfluoroalkyl substances (PFAS): An indirect potable reuse case study from Maryland, USA. [Under Review].
- Morgado M, Brumfield KD, Mitchell C, Boyle M, Colwell RR, Sapkota AR. Vibriosis trends in Maryland, U.S., 2006-2019: Increased incidence of water-associated wound infections and risk of hospitalization. [Under Review].

Articles In Preparation

- 101. Chattopadhyay S*, Malayil L, Hittle L, Buehler S, Mongodin EF, **Sapkota AR**. The oral microbiome remains stable after a single use of little cigars and traditional cigarettes. [In Preparation].
- 102. Malayil L, Allard S, Ramachandran P, Chattopadhyay S, Nzokou C, Xioxuan S, Hudson C, Mongodin EF, Ferrier D, Rosenberg Goldstein RE, **Sapkota AR**. Source tracking microbial communities from rooftop harvested rainwater to irrigated soil and produce. [In Preparation].
- 103. Malayil L, Chattopadhyay S, Mongodin EF, **Sapkota AR**. Comparison of commonly used DNA labels coupled with sequencing techniques to detect metabolically-active bacteria in environmental samples. [In Preparation].

Book Chapters

 Sapkota AR. Chapter 26: Other Water Pollutants: Antibiotic-Resistant Bacteria. Water and Sanitation Related Diseases and the Environment: Challenges, Interventions and Preventive Measures. Janine M. H. Selendy (Editor). ISBN: 978-0-470-52785-6. November 2011, Wiley-Blackwell.

Reports

 Chapin AR, Boulind C, Moore A. 1998. Controlling Odor and Gaseous Emission Problems from Industrial Swine Facilities: A Handbook for All Interested Parties. The Kerr Center for Sustainable Agriculture. Poteau, OK. Contribution of Amy R. Sapkota: Performed literature review and wrote 1/3 of the report. Chapin AR, Venezia R. 2000. A Message About Cancer Clusters from the Maryland Department of Health and Mental Hygiene. Office of Environmental Health, Maryland Department of Health and Mental Hygiene. Baltimore, MD. <u>Contribution of Amy R. Sapkota</u>: Developed, organized, wrote and designed the entire report.

Invited National and International Presentations (Chapin is maiden name)

- Chapin AR. Environmental health effects of industrial swine production. Invited Oral Presentation. United States Geological Survey, Animal Feeding Operations Conference. Fort Collins, CO. August 1999.
- 2. **Chapin AR**. Managing chicken waste: policies and ideas at the state, national and international levels. Invited Oral Presentation. Yale University Conference, The Chicken: Its Biological, Social, and Industrial History. New Haven, CT. May 2002.
- 3. **Sapkota AR.** Animal agriculture and antibiotic resistance: Do organic practices make a difference? Invited Oral Presentation. Washington University in St. Louis, School of Engineering, Department of Energy, Environmental and Chemical Engineering. St. Louis, MO. March 14, 2008.
- Sapkota AR, Joseph SW, Cullen P, Wagner D, Hulet M, Hayes J, Sahu S, Gadwal S, Carr LE, Hooberman B. Reduced resistance to antibiotics among *Salmonella* spp. recovered from U.S. organic poultry farms. Invited Oral Presentation. American Society for Microbiology (ASM), Conference on Antimicrobial Resistance in Zoonotic Bacteria and Foodborne Pathogens. Copenhagen, Denmark. June 2008.
- Sapkota AR. Concentrated animal feeding operations and antimicrobial resistance: Does adopting organic practices make a difference? Invited Oral Presentation. Society of Toxicology, National Capitol Area Chapter. "Food Safety—From Farm to Table" Conference. University of Maryland. College Park, MD. October 28, 2010.
- 6. **Sapkota AR.** Agriculture, Water and Public Health. Invited Oral Presentation/Webinar Talk. Creating Common Ground: Sustainable Agriculture & Food Systems Funders. November 18, 2013.
- 7. **Sapkota AR.** Distinguished Women in Environmental Health Sciences. Invited Panelist. Johns Hopkins Bloomberg School of Public Health, April 11, 2014. Baltimore, MD.
- 8. **Sapkota AR.** Aquatic Environments as Reservoirs of Antibiotic-resistant Bacteria. Invited Speaker in Symposium entitled "Surrounded by the enemy? The environment and foodstuffs as sources or reservoirs of antimicrobial resistance threats." Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC)/International Congress on Chemotherapy (ICC), September 17-21, 2015. San Diego, CA.
- 9. **Sapkota AR.** Safe Water to Grow Healthy Food in a Changing Climate. Invited Speaker in Symposium entitled "Climate Change Resilience/Adaptation: Health and Agroecosystem." Climate Action Summit 2016: Catalyzing a Sustainable Future, May 4, 2016. College Park, MD.
- 10. **Sapkota AR.** Influence of local tobacco use on the oral microbiota and lung cancer risk in Nepal. Invited Speaker. B.P. Koirala Memorial Cancer Hospital, January 23, 2017. Bharatpur, Nepal.
- 11. **Sapkota AR.** Microbes within us: Friends or foes? Impacts of the oral microbiota on lung cancer risk in Nepal. Invited Speaker. U.S. Embassy in Nepal. June 12, 2017. Kathmandu, Nepal.
- 12. **Sapkota AR.** Recycled water, crop irrigation, and public health: moving the science forward to achieve sustainable water reuse in a changing climate. Invited Speaker in Symposium entitled

"Moving toward the safe use of recycled water for crop irrigation: a sustainable solution in an era of climate variability?" International Association for Food Protection Annual Meeting, July 11, 2017. Tampa, FL.

- 13. Sapkota AR. Water reuse, crop irrigation, and public health: moving the science forward to achieve safe and sustainable water reuse in a changing climate. Invited Speaker in Symposium entitled "Moving towards safe water reuse for food crop irrigation: a sustainable solution in an era of climate variability?" 11th International Water Association International Conference on Water Reclamation and Reuse, July 23-27, 2017. Long Beach, CA.
- 14. Sapkota AR. Wastewater reclamation, antibiotic resistance, and protection of public health. Invited Speaker in Symposium entitled "Antibiotic Resistance: What Every Water Professional Needs to Know." 11th International Water Association International Conference on Water Reclamation and Reuse, July 23-27, 2017. Long Beach, CA.
- 15. **Sapkota AR.** The CONSERVE Program: Transdisciplinary Research, Extension and Education at the Nexus of Sustainable Water Reuse, Food and Health. Invited Webinar. ANREP and Climate Learning Network Webinar Series, December 7, 2017.
- 16. **Sapkota AR.** Water reuse, crop irrigation and public health: Moving the science forward to achieve safe and sustainable water reuse in a changing climate. Invited speaker. Arava Institute for Environmental Studies, Ketura, Israel, December 28, 2017.
- 17. **Sapkota AR.** Water reuse, food crop irrigation and public health. Invited Speaker. Water Reuse, Food and Health Forum. Kibbutz Tzuba, Tzovah, Israel, January 3, 2018.
- Sapkota AR. Water reuse, crop irrigation, and public health: Moving the science forward to achieve safe and sustainable water reuse in a changing climate. Invited Speaker. 2nd 1890 ARD and USDA-ARS Food Safety Symposium, Beltsville, MD, April 25, 2018.
- 19. **Sapkota AR.** Potential public health impacts of reusing water on food crops. Invited Speaker. 2018 Water Research Foundation Conference, Atlanta, Georgia, May 6, 2018.
- 20. **Sapkota AR.** Recycled Irrigation Water Microbiomes, Human Exposure Pathways and Potential Human Health Impacts. Invited Speaker. Global Water Reuse, Food and Health Workshop, College Park, MD, October 9, 2018.
- 21. **Sapkota AR.** Recycled water, food crop irrigation and public health: Moving the science forward to achieve sustainable water reuse in a changing climate. Invited Speaker. AWRA Annual Conference, Baltimore, MD, November 6, 2018.
- Sapkota AR. One water and public health: Research to action through outreach and education. Invited Speaker. Presidential Advisory Council on Controlling Antibiotic Resistance Public Meeting, U.S. Department of Health and Human Services, Washington, D.C., January 31, 2019.
- 23. **Sapkota AR.** Antimicrobial resistance and the intersections of water reuse, food and health. Invited Speaker. Urbanization, Water and Food Security, Gordon Research Conference. The Hong Kong University of Science and Technology. July 21-26, 2019.
- Sapkota AR. Refining sampling and analysis approaches to advance understanding of the microbiological risks of agricultural water reuse. Invited Speaker. Global Water and Food Safety Summit. U.S. Food and Drug Administration and University of Maryland Joint Institute of Food Safety and Applied Nutrition. College Park, MD. November 19, 2019.

- 25. **Sapkota AR.** Reimagining solutions to address microbiological risks of agricultural water reuse. Invited Speaker. Virtual. 2020 WateReuse Symposium. September 13-16, 2020.
- 26. **Sapkota AR.** Reimagining solutions to address microbiological risks of agricultural water reuse. Invited Speaker. University of Alabama, Birmingham, School of Public Health, Department of Epidemiology, February 15, 2021.
- 27. **Sapkota AR.** Advancing understanding of emerging constituents in recycled irrigation water. Invited Speaker. Virtual. 2021 WateReuse Symposium. March 2021.
- 28. **Sapkota AR.** Recycled irrigation water: Opportunities and challenges. Invited Speaker. Virtual. National Science Foundation Convergence Accelerator: Accelerating Food Security in Extreme Environments and Food Deserts. May 19-21, 2021.
- 29. **Sapkota AR.** Reimagining solutions to address emerging contaminants in recycled irrigation water. Invited Speaker. Virtual. Food Systems Fridays, Prescott College. May 21, 2021.
- 30. Sapkota AR. Reimagining solutions to address microbiological and chemical risks of agricultural water reuse. Invited Speaker and Convener. Virtual. Session Number AES122: Every Drop Counts: Advancing Agricultural Water Reuse Through Transdisciplinary Approaches. World Microbe Forum. Online Worldwide. An American Society for Microbiology and Federation of European Microbiological Societies Collaboration. June 22, 2021.
- 31. **Sapkota AR.** The DAWN Education Team. Invited Speaker. Virtual. Daugherty Water for Food Global Institute Forum, Oct 14, 2021
- 32. **Sapkota AR.** Climate Change: The impacts of extreme weather events on the safety of our food supply. Invited Speaker. International Association for Food Protection, Annual Meeting, 2022, July 31-August 3, 2022. Pittsburgh, PA.
- 33. **Sapkota AR.** Environmental surveillance for antimicrobial resistance (AMR) determinants. Invited Speaker. Virtual MITRE One Health Seminar Series. October 28, 2022.
- 34. **Sapkota AR.** Reimagining solutions to address emerging contaminants in recycled irrigation water. Invited Speaker. Virtual. U.S. EPA, Office of Water. November 30, 2022.
- 35. **Sapkota AR.** UMD Global STEWARDS NSF NRT: Successes, Challenges and Sustainability. Invited Speaker. Virtual. Genetic Engineering and Society Colloquium, NC State University. February 14, 2023.
- 36. **Sapkota AR.** Advancing Agricultural and Municipal Water Reuse Through Systems-based Research, Training and Extension. Invited Speaker. Virtual. Habitat Innovation Conclave 2023. Kathmandu, Nepal. March 17, 2023.
- 37. **Sapkota AR.** Reimagining Solutions to Address Emerging Contaminants in Recycled Irrigation Water. Keynote Speaker. Bangladesh Association for Food Protection in North America. May 13, 2023.

Invited Local Presentations (Chapin is maiden name)

1. **Chapin AR.** The dynamic genomes of bacteria that allow them to thrive in the environment and in us. Invited Speaker. Johns Hopkins Bloomberg School of Public Health Rededication Ceremony. Johns Hopkins Bloomberg School of Public Health, Baltimore, MD. April 2004.

- 2. **Sapkota AR**. Animal feed components and the impacts of land-applying manure on soil bacterial biodiversity and antibiotic resistance. Invited Oral Presentation. Center for a Livable Future Research Day. Johns Hopkins Bloomberg School of Public Health. Baltimore, MD. April 2008.
- 3. **Sapkota AR.** Animal agriculture and antibiotic resistance: Do organic practices make a difference? Invited Oral Presentation. Department of Epidemiology and Biostatistics Seminar Series. University of Maryland School of Public Health. College Park, MD April 18, 2008.
- 4. **Sapkota AR,** Joseph SW, Estrin A, Boyer M, McLaughlin C. Evaluating public health impacts and costeffectiveness of implementing good agricultural practices (GAPs) in the tomato farm environment. Invited Oral Presentation. University of Maryland, Joint Institute for Food Safety and Applied Nutrition, Advisory Council Meeting. College Park, MD. March 11, 2009.
- Sapkota AR, Joseph SW, Estrin A, Boyer M, McLaughlin C. Evaluating public health impacts and costeffectiveness of implementing good agricultural practices (GAPs) in the tomato farm environment. Invited Oral Presentation. University of Maryland, Joint Institute for Food Safety and Applied Nutrition, Advisory Council Meeting. College Park, MD. March 16, 2010.
- Sapkota AR. Animal agriculture and antimicrobial resistance: do organic practices make a difference? Invited Oral Presentation. University of the District of Columbia. Washington, D.C., April 13, 2010.
- 7. **Sapkota AR.** Impacts of good agricultural practices (GAPs) on *Salmonella* contamination on Mid-Atlantic tomato farms. Invited Oral Presentation. Maryland Department of Health and Mental Hygiene. Baltimore, MD. July 28, 2010.
- 8. **Sapkota AR.** Concentrated animal feeding operations and antimicrobial resistance: Does adopting organic practices make a difference? Invited Oral Presentation. National Institutes of Health. Public Health Certificate Program. Bethesda, MD. November 2, 2010.
- 9. **Sapkota AR**. Microbial toxins. Invited Oral Presentation. National Institutes of Health. Public Health Certificate Program. Bethesda, MD. November 15, 2010.
- 10. **Sapkota AR.** FoodNet partnerships with the University of Maryland. Invited Oral Presentation. Maryland Department of Health and Mental Hygiene. Centers for Disease Control and Prevention Site Visit for the Maryland Emerging Infections Program. Baltimore, MD. June 23, 2011.
- 11. **Sapkota AR**. An environmental health career in academia. Invited Oral Presentation. Johns Hopkins Bloomberg School of Public Health, Environmental Health Sciences Alumni Panel. Baltimore MD. October 24, 2011.
- 12. **Sapkota AR.** Concentrated animal feeding operations and antimicrobial resistance: Does "going organic" make a difference? Invited Speaker. University of Maryland, School of Medicine, Department of Epidemiology and Public Health. Epidemiology and Public Health Seminar Series. Baltimore, MD. December 1, 2011.
- 13. **Sapkota AR**. Occurrence and antibiotic resistance of *Salmonella* and *Enterococcus* recovered from Mid-Atlantic tomato farms. State of Maryland, Infectious Disease Annual Update, 2012. Invited Speaker. Clarksville, MD. May 9, 2012.
- 14. **Sapkota AR.** Reclaimed water: A "safe" alternative freshwater resource or a potential source of antibiotic-resistant bacteria? Invited Speaker. University of Maryland, School of Medicine, Institute for Genome Sciences. Baltimore, MD. March 11, 2015.

- 15. **Sapkota AR.** CONSERVE: A Center of Excellence at the Nexus of Sustainable Water Reuse, Food and Health. Invited Speaker. University System of Maryland, Council on the Environment, Brown Bag Series. College Park, MD. December 7, 2015.
- 16. Sapkota AR. Nontraditional irrigation water for food crops in a changing climate: Is reclaimed water a safe bet? Invited Speaker. US Environmental Protection Agency, Office of Water, Climate Change Speaker Series. Washington, D.C. July 19, 2016.
- 17. **Sapkota AR.** CONSERVE: A Center of Excellence at the Nexus of Sustainable Water Reuse, Food & Health. Invited Speaker. Mid-Atlantic Microbiome Meet-up. University of Maryland, College Park. College Park, MD. November 2, 2016.
- Sapkota AR, and Rosenberg Goldstein R. Conserving groundwater through nontraditional irrigation water: Assessing farmers needs and water quality. Invited Speakers. Maryland Groundwater Symposium, Baltimore, MD, September 28, 2017.
- 19. **Sapkota AR.** CONSERVE: A Center of Excellence at the Nexus of Sustainable Water Reuse, Food & Health. Invited Speaker. Joint Institute for Food Safety and Applied Nutrition, Advisory Council Meeting, Greenbelt, MD, November 2, 2017.
- 20. **Sapkota AR.** CONSERVE: A Center of Excellence at the Nexus of Sustainable Water Reuse, Food & Health. Invited Speaker. Maryland Department of the Environment, Baltimore, MD, December 5, 2017.
- 21. Rosenberg Goldstein R, and **Sapkota AR.** Nontraditional irrigation water for produce: Assessing farmer's needs and water quality. Invited Speakers. 2018 Future Harvest CASA Conference, College Park, MD, January 11, 2018.
- 22. **Sapkota AR.** Water Reuse, Crop Irrigation, and Public Health: Moving the Science Forward to Achieve Safe and Sustainable Water Reuse in a Changing Climate. Invited Speaker. 2nd 1890 ARD and USDA-ARS Food Safety Symposium, Beltsville, MD, April 25, 2018.
- 23. **Sapkota AR.** Recycled Water, Food Crop Irrigation, and Public Health: Moving the Science Forward to Achieve Safe and Sustainable Water Reuse in a Changing Climate. Invited Speaker. University of Maryland, College of Agriculture and Natural Resources Conference, Global Challenges: Building Healthy Food Systems, College Park, MD, October 4, 2018.
- 24. **Sapkota AR.** Recycled Water, Food Crop Irrigation, and Public Health: Moving the Science Forward to Achieve Safe and Sustainable Water Reuse in a Changing Climate. Invited Speaker. University of Maryland Eastern Shore, School of Agriculture and Natural Sciences Seminar Series, Princess Anne, MD, November 29, 2018.
- 25. **Sapkota AR.** CONSERVE: Achievements to date and future directions. Invited Speaker. Maryland Department of the Environment, Baltimore, MD, December 18, 2018.
- 26. **Sapkota AR.** Recycled Water, Food Crop Irrigation, and Public Health: Moving the Science Forward to Achieve Safe and Sustainable Water Reuse in a Changing Climate. Invited Speaker. Johns Hopkins Bloomberg School of Public Health, Department of Environmental Health and Engineering, Grand Rounds, Baltimore, MD, April 12, 2019.
- 27. **Sapkota AR.** Recycled Water, Food Crop Irrigation, and Public Health: Exploring Sequencing Approaches to Advance Understanding of the Microbiological Risks of Water Reuse. Invited Speaker. University of Maryland Bioscience Day, November 12, 2019.

- 28. **Sapkota AR.** Recycled Water, Food Crop Irrigation, and Public Health: Moving the Science Forward to Achieve Sustainable Water Reuse in a Changing Climate. Invited Speaker. Maryland Department of Health, January 31, 2020.
- 29. **Sapkota AR.** Advancing Environmental Health in a Changing World Through Systems-based Research, Training and Leadership. Invited Speaker. GWU Milken Institute School of Public Health, Department of Environmental and Occupational Health, November 16, 2022.
- 30. **Sapkota AR.** Reimagining Solutions to Address Emerging Contaminants in Recycled Irrigation Water. Invited Speaker. University of Maryland School of Public Health, Department of Kinesiology, First Fridays AM Seminar Series, December 2, 2022.
- 31. **Sapkota AR.** Reimagining Solutions to Address Emerging Contaminants in Recycled Irrigation Water. Invited Speaker. BioFire Spring Colloquium. University of Maryland College Park. March 14, 2023.

Refereed Conference Proceedings (Chapin is maiden name; †denotes senior author; #denotes advised undergraduate students; *denotes advised graduate students; **denotes advised post-docs)

- 1. **Chapin AR**, Boulind C, Naman P, Sircar K, Yee S, Yu C. Actual and perceived health risks associated with a former munitions plant; Bridgeport, CT. Roundtable Presentation, American Public Health Association, Annual Meeting, Washington, D.C., November, 1998.
- Chapin AR, Boulind C, Moore A. Controlling odors and gases emitted from industrial swine facilities. Oral Presentation, American Public Health Association, Annual Meeting, Chicago, IL, November, 1999.
- 3. **Chapin AR[†]**, Venezia R. Using GIS to explore the relationship between socioeconomic factors and asthma mortality in Maryland. Poster Presentation, American Public Health Association, Annual Meeting, Boston, MA, November 2000.
- Chapin AR, Carpenter CM, Dudley WC, Gibson LG, Bourgeois AL, Schwab KJ⁺. Rapid molecular diagnostic techniques for determining the role of Norovirus in traveler's diarrhea occurring among U.S. visitors to Mexico and Guatemala. Poster Presentation, American Society for Microbiology, 103rd General Meeting, Washington, D.C., May 2003.
- Chapin AR, Geer L, Lee E, Gibson KE, Rule AM, Secrest C, Buckley TJ, Schwab KJ⁺. Assessing the impact of a swine concentrated animal feeding operation on the air and water quality of a rural community. Poster Presentation, International Society for Exposure Analysis, 13th Annual Conference, Stresa, Italy, September, 2003.
- Chapin AR, McCarthy SA, Rule AM, Gibson KE, Buckley TJ, Schwab KJ⁺. Antibiotic-resistant bacteria in air and water associated with poultry and swine concentrated animal feeding operations. Poster Presentation, American Society for Microbiology, 104th General Meeting, New Orleans, LA, May 2004.
- 7. **Chapin AR**, McCarthy SA, Rule AM, Gibson KE, Buckley TJ, Schwab KJ⁺. Multi-drug resistant bacteria in air and water associated with poultry and swine concentrated animal feeding operations. Poster Presentation, U.S. Environmental Protection Agency, Regional Science Workshop: Animal Feeding Operations, Science and Technical Support Needs, College Park, MD, December 2004.
- Chapin AR, Ojo KK, Roberts MC, Schwab KJ⁺. Prevalence of macrolide, lincosamide, streptogramin and tetracycline resistance genes in airborne gram-positive bacteria recovered from a concentrated swine feeding operation. Poster Presentation, American Society for Microbiology, 105th General Meeting, Atlanta, GA, June 2005.

- Sapkota AR⁺, Navarro E, Vogel TM. Antibiotic-resistant bacteria and microbial biodiversity in French agricultural soils amended with pig manure. Poster Presentation, 11th International Symposium on Microbial Ecology, Vienna, Austria, August 2006.
- Joseph SW, Paramadhas R, Cullen P, Wagner D, Hulet M, Hayes J, Sapkota AR, Gadwal S, Carr LE, Hooberman B. Reduced resistance to antibiotics among *Enterococcus faecium* of organic poultry farm origin. Poster Presentation, 47th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois, September 2007.
- 11. **Sapkota AR**⁺, Demaneche S, Navarro E, Simonet P, Vogel TM⁺. The metagenomic search for antibiotic resistance in soil. Oral Presentation, 2nd Symposium on Antimicrobial Resistance in Animals and the Environment, Tours, France, December 2007.
- 12. Shaw K*, **Sapkota AR**, Jacobs J, Rhodes M, Crump B⁺. Ecological and exposure assessment of natural bacterioplankton communities, including populations of *Vibrio parahaemolyticus* and *Vibrio vulnificus*, and select viral pathogens. Poster Presentation, Gordon Research Conference, 2008.
- Sweet S*, Rosenberg R*, Kinney EL*, Otivhia E, Ojo MT, Ayepola Y, Olajuyigbe OO, Coker ME, Ojo KK, Sapkota AR⁺. Self-prescribed use of antimicrobials for menstrual symptoms among Nigerian university students. Poster Presentation, American Public Health Association Annual Meeting, San Diego, California, October 2008.
- 14. Rosenberg Goldstein RE*, Micallef SA**, George A*, Sapkota A, Gibbs SG, Joseph SW, **Sapkota AR**⁺. Irrigation workers' exposures to antimicrobial-resistant bacteria and antimicrobials present in reclaimed wastewater. Poster Presentation, American Public Health Association Annual Meeting, Philadelphia, PA, November 2009.
- 15. Micallef SA**, Rosenberg Goldstein RE*, George A[#], Ewing L, Jean-Gilles Beabrun J, Hanes DE, Kothary MH, Tall BD, Boyer MS, McLaughlin CR, Estrin AJ, Sapkota, AR⁺. Occurrence and antibiotic susceptibilities of multiple Salmonella serotypes in the tomato farm environment. Poster Presentation, American Society for Microbiology, 110th General Meeting, San Diego, CA, May 2010.
- 16. Kinney EL*, Kim A#, Hulet RM, McDermott P, Schwab KJ, Zhang G, Joseph SW, Sapkota AR⁺. Trends in the prevalence and antibiotic-resistance of *Salmonella* after conventional poultry farms transition to organic practices. Poster Presentation, American Society for Microbiology, 110th General Meeting, San Diego, CA, May 2010.
- Rosenberg Goldstein RE*, Micallef SA**, George A*, Sapkota A, Gibbs SG, Joseph SW, Sapkota AR⁺. Reductions of methicillin-resistant *Staphylococcus aureus* and vancomycin-resistant *Enterococcus* spp. at a U.S. tertiary wastewater treatment plant. Poster Presentation, American Society for Microbiology, 110th General Meeting, San Diego, CA, May 2010.
- Jean-Gilles Beaubrun J, Cheng C, Chen K, Ewing L, Wang H, Agpaoa MC, Huang MJ, Dickey E, Du JM, Williams-Hill DM, Hamilton B, Micallef SA**, Rosenberg Goldstein RE*, George A[#], Joseph SW, Sapkota AR, Jacobson AP, Tall BD, Kothary MH, Dudley K and Hanes DE⁺. Comparison of two molecular methods for serotyping *Salmonella*. Poster Presentation, American Society for Microbiology, 110th General Meeting, San Diego, CA, May 2010.
- 19. Rosenberg Goldstein RE*, Micallef SA**, George A[#], Sapkota A, Gibbs SG, Joseph SW, **Sapkota AR**⁺. Evaluating occupational exposures to antibiotic-resistant bacteria from wastewater reuse. Oral presentation, Water and Health: Where Science Meets Policy 2010 Conference, University of North Carolina at Chapel Hill, Chapel Hill, NC, October 2010.

- 20. Lilly A*, **Sapkota AR**, Mudd C, Ferguson S, Shelton D, Ingram DT, and Sharma M⁺. Persistence of somatic and f-specific coliphages, potential indicators of fecal contamination, on spinach foliar tissue. Poster Presentation, International Association for Food Protection, July 31-Aug 3, 2011.
- 21. Micallef SA**, Rosenberg Goldstein RE*, George A#, Ewing L, Tall BD, Boyer MS, Joseph SW, Sapkota AR⁺. Diversity and antibiotic resistance of *Enterococcus* spp. from tomato farms. Poster Presentation, American Society for Microbiology 111th General Meeting, New Orleans, LA, May 2011.
- 22. Rosenberg Goldstein RE*, Micallef SA**, George A*, Gibbs SG, Sapkota A, Joseph SW, and Sapkota AR⁺. Survival of methicillin-resistant *Staphylococcus aureus* in Secondary Treated Wastewater. Poster Presentation, American Society for Microbiology 111th General Meeting, New Orleans, LA, May 2011.
- 23. Grim C, Chang Z, Horneman A, Tall B, **Sapkota AR**, Joseph SW⁺. Characterization of lactose-positive *Aeromonas caviae* isolates using a polyphasic approach. Poster Presentation, 10th International Symposium on *Aeromonas* and *Plesiomonas*. Galveston, TX, May 2011.
- 24. Rosenberg Goldstein RE*, Micallef SA**, George A*, Sapkota A, Gibbs SG, Joseph SW, Sapkota AR⁺. Assessing an alternative water source: Evaluation of methicillin-resistant *Staphylococcus aureus* in secondary treated wastewater used for spray irrigation in Nebraska. Oral presentation, Water and Health: Where Science Meets Policy 2011 Conference, University of North Carolina at Chapel Hill, Chapel Hill, NC, October 2011.
- 25. Rosenberg Goldstein RE*, Aspinwall K, Maring EF, Pee, D, **Sapkota AR**⁺. Well water education program: A collaborative project between extension educators and University of Maryland public health researchers. Oral presentation, Priester National Extension Health Conference, Washington, D.C., April 2012.
- 26. Rosenberg Goldstein RE*, Aspinwall K, Maring EF, Pee, D, **Sapkota AR**⁺. Analysis of Private Well Water Quality and Well Owner Education Program in Maryland: A Pilot Project. Oral Presentation, Maryland Groundwater Symposium. Baltimore, MD, September 2012.
- 27. Pasturel BZ*, Cruz-Cano R, Rosenberg Goldstein RE*, Palmer A, Blythe D, Ryan P, Hogan B, Jung C, Joseph SW, Wang MQ, Ting Lee ML, Puett R and **Sapkota AR**⁺. Socioeconomic and environmental disparities in the risk of campylobacteriosis in Maryland. Poster presentation, American Public Health Association Annual Meeting, San Francisco, CA, October 2012.
- Rosenberg Goldstein RE*, Aspinwall K, Maring EF, Pee, D, Sapkota AR⁺. Analysis of Private Well Water Quality and Well Owner Education Program in Maryland: A Pilot Project. Poster Presentation, Maryland Water Monitoring Council 18th Annual Conference. Linthicum Heights, MD, December 2012.
- 29. Jiang CS, **Sapkota AR**, Blythe D, Sapkota A⁺. Increased frequency of unusually hot days and foodborne illness in Maryland. Poster Presentation, Environment and Health–Bridging South, North, East and West, Conference of ISEE, ISES and ISIAQ, Basel, Switzerland 19 23 August 2013.
- 30. Mongodin EF, Claye E*, Kulkarni P*, Maddox C, Fraser CM, Clark PI, **Sapkota AR**⁺. Exploring tobacco microbial constituents and the oral microbiome of tobacco users. Poster Presentation, Tobacco Regulatory Science Program Meeting, National Institutes of Health, Bethesda, MD, April 2014.
- 31. **Sapkota AR⁺**, Kulkarni P^{*}, Claye E^{*}, Rosenberg Goldstein R^{**}, Gibbs SG, Pop M, Cummings M, Maddox C, Mongodin EF. Evaluating the Bacterial Microbiota of Reclaimed Water Using

Next-Generation Sequencing. Poster Presentation, 2014 Water and Health Conference: Where Science Meets Policy, University of North Carolina Water Institute, Chapel Hill, NC, October 2014.

- 32. Chattopadhyay S*, Claye E*, Kulkarni P*, Babik, K*, Hittle L, Paulson JN*, Cruz-Cano R, Pop M, Mongodin EF, Sapkota AR⁺. Differences in the bacterial microbiota associated with mentholated versus non-mentholated cigarette tobacco. Poster Presentation, 21st Annual Meeting of the Society for Research on Nicotine and Tobacco (SRNT), Philadelphia, PA, February 2015.
- 33. Mongodin EF, Smyth E**, Chattopadyay S, Hittle L, Claye E*, Kulkarni P*, Sapkota AR⁺. Characterization of the bacterial microbiota associated with little cigars. Poster Presentation, Tobacco Centers of Regulatory Science (TCORS) In-Person Meeting. National Institutes of Health, Bethesda, MD, October 2015.
- 34. Soneja S**, Jiang C, Mitchell C, Sapkota AR⁺, Sapkota A⁺. Campylobacteriosis risk of hospital admission related to extreme weather event frequency in Maryland. Oral Presentation, 27th Conference of the International Society for Environmental Epidemiology (ISEE). Sao Paolo, Brazil. August 30-September 3, 2015.
- 35. Soneja S^{**}, Jiang C, Mitchell C, **Sapkota AR**⁺, Sapkota A⁺. Examining the exposure to extreme weather events and risk of Campylobacteriosis in Maryland. Oral Presentation, 25th Annual Meeting of the International Society of Exposure Science (ISES). Henderson, Nevada. October 18-22, 2015.
- 36. Chopyk J*, Chattopadhyay S, Kulkarni P*, Smyth EM**, Hittle LE, Paulson JN, Cruz-Cano R, Pop M, Clark P, Mongolian EF, Sapkota AR⁺. Brand, mentholation status and storage conditions influence the bacterial microbiota of cigarette tobacco. Poster Presentation. 22nd Annual Meeting of the Society for Research on Nicotine and Tobacco (SRNT). Chicago, IL. March 5, 2016.
- 37. Mongodin EF, Smyth EM**, Chattopadhyay S, Hittle L, Claye E, Kulkarni P*, Sapkota AR⁺. Characterization of the bacterial microbiota associated with little cigars. Poster Presentation. 22nd Annual Meeting of the Society for Research on Nicotine and Tobacco (SRNT). Chicago, IL. March 5, 2016.
- 38. Chopyk J*, Chattopadhyay S, Kulkarni P*, Smyth EM**, Hittle LE, Paulson JN**, Pop M, Clark P, Mongodin EF, Sapkota AR⁺. Influence of brand, mentholation and storage conditions on the bacterial microbiota of cigarette tobacco. Poster Presentation, 16th International Symposium on Microbial Ecology. Montreal, Canada. August 21-26, 2016.
- Smyth EM**, Chattopadhyay S, Hittle L, Claye E, Kulkarni P*, Mongodin EF, Sapkota AR⁺. The bacterial microbiota of little cigar tobacco and wrapper. Poster Presentation, 16th International Symposium on Microbial Ecology. Montreal, Canada. August 21-26, 2016.
- Soneja S**, Jiang C, Fisher J, Blythe D, Mitchell C, Sapkota AR⁺, Sapkota A⁺. Role of El Niño Southern Oscillation (ENSO) in extreme event related adverse health outcomes in Maryland, USA. Oral Presentation, 28th Conference of the International Society for Environmental Epidemiology (ISEE). Rome, Italy. September 1, 2016.
- 41. Kulkarni P*, Olson N*, Paulson JN, Pop M, Maddox C, Mongodin EF, **Sapkota AR**⁺. U.S. Wastewater and Reclaimed Water Harbor Diverse and Dynamic Bacterial Communities Throughout Treatment and Storage Processes. Poster presentation. *2016 Water and Health Conference: Where Science Meets Policy*, University of North Carolina at Chapel Hill, Chapel Hill, NC. October 10-14, 2016.
- 42. Kulkarni P**, Olson N*, Raspanti G**, Sapkota A, **Sapkota AR**⁺. Occurrence of Antibiotic Residues in Wastewater and Reclaimed Water in the United States. Poster presentation. *2016 Water and Health*

Conference: Where Science Meets Policy, University of North Carolina at Chapel Hill, Chapel Hill, NC. October 10-14, 2016.

- 43. Boyle M*, Soneja S**, Quiros-Alcala L, Sapkota AR, Dalemarre L, Sangaramoorthy T, Wilson S, Milton D, Sapkota A⁺. Examining the association between natural gas compressor stations and residential noise in West Virginia, USA. Poster Presentation, 26th Annual Meeting of the International Society for Exposure Science (ISES). Utrecht, Netherlands. October 21, 2016.
- 44. Smyth EM**, Chattopadhyay S, Hittle L, Claye E, Kulkarni P*, Mongodin EF+, Sapkota AR+. The bacterial microbiota of little cigar tobacco and wrapper. Poster Presentation. Tobacco Centers of Regulatory Science Grantee Meeting. National Institutes of Health. Bethesda, MD, November 7-8, 2016.
- 45. Smyth EM^{**}, Clark PI, Mongodin EF⁺, **Sapkota AR**⁺. The fungal microbiota of tobacco products and its potential public health implications. Poster Presentation. Tobacco Centers of Regulatory Science Grantee Meeting. National Institutes of Health. Bethesda, MD, November 7-8, 2016.
- 46. Malayil L*, Chattopadyay S, Smyth EM, Chopyk J*, Pop M, Clark PI, Sapkota AR⁺, Mongodin EF⁺. Brand-specific alteration of the bacterial microbiota by mentholation of commercial cigarette products. Poster Presentation. Tobacco Centers of Regulatory Science Grantee Meeting. National Institutes of Health. Bethesda, MD, November 7-8, 2016.
- 47. Mongodin EF⁺, Chopyk J^{*}, Chattopadhyay S, Kulkarni P^{*}, Smyth EM^{**}, Hittle LE, Paulson JN, Pop M, Clark P, **Sapkota AR**⁺. The cigarette microbiota is influenced by brand, mentholation and storage conditions: implications for potential exposure to tobacco-specific nitrosamines and bacterial pathogens. Poster Presentation. 23rd Annual Meeting of the Society for Research on Nicotine and Tobacco (SRNT). Florence, Italy. March 8-11, 2017.
- 48. Mongodin EF⁺, Smyth EM^{**}, Chattopadhyay S, Hittle LE, Claye E, Kulkarni P^{*}, Clark P, Sapkota AR⁺. The little cigar microbiota is characterized by a distinct and diverse bacterial community. Poster Presentation. 23rd Annual Meeting of the Society for Research on Nicotine and Tobacco (SRNT). Florence, Italy. March 8-11, 2017.
- 49. Chopyk J*, Malayil L*, Chattopadhyay S, Smyth EM**, Hittle LE, Clark P, Sapkota AR⁺, Mongodin EF⁺. Temporal dynamics of the flavor, storage condition and microbiota triad in hookah tobacco. Poster Presentation. 23rd Annual Meeting of the Society for Research on Nicotine and Tobacco (SRNT). Florence, Italy. March 11, 2017.
- 50. Malayil L*, Chattopadhyay S, Chopyk J*, Mongodin EF⁺, **Sapkota AR**⁺. Exploring the bacterial microbiota associated with commercial hookah tobacco products. Poster Presentation. American Society for Microbiology, Microbe, Annual Meeting. New Orleans, LA. June 1-5, 2017.
- Chattopadhyay S, Smyth E**, Hittle L**, Mongodin EF, Sapkota AR⁺. Exploring the microbiota of commercially available little cigars. Poster Presentation. American Society for Microbiology, Microbe, Annual Meeting. New Orleans, LA. June 1-5, 2017.
- 52. Kulkarni P**, Raspanti G**, Bui AQ, Bradshaw RN*, Handy ET, Kniel KE, Coppock C, Sharma M, Sapkota A, Sapkota AR⁺. Zero-valent iron-biosand filtration is capable of reducing antimicrobial and generic *E. coli* in unbuffered conventionally treated reclaimed water. A CONSERVE Project. Poster Presentation. 2017 International Association for Food Protection Annual Meeting. Tampa, FL. July 12, 2017.
- 53. Allard S^{**}, Solaiman S^{*}, Callahan MT, Handy E, East C, Craddock Kelbick H^{*}, Murray R^{**}, Bui A, Haymaker J^{*}, Foust D^{*}, Gartley S^{*}, Vanore A, Parveen S, Hashem F, Taabodi M, May E, Kniel K,

Sharma M, Micallef S, **Sapkota AR[†].** Generic *E. coli* levels in surface and nontraditional irrigation water in the Mid-Atlantic in relation to FSMA water quality standards: A CONSERVE study. Poster Presentation, International Association for Food Protection Annual Meeting. Tampa, FL. July 9-12, 2017.

- 54. Solaiman S*, Callahan MT, Allard S**, Handy E, East C, May E, Hashem F, Parveen S, Kniel K, Sharma M, Sapkota AR, Micallef S⁺. Assessment of indicator bacteria and *Aeromonas spp.* in surface and nontraditional irrigation water: A CONSERVE study. Poster Presentation, International Association for Food Protection Annual Meeting. Tampa, FL. July 9-12, 2017.
- 55. Handy E, East C, Callahan MT, Allard S**, Craddock Kelbick H*, Micallef S, Kniel K, Hashem F, Parveen S, May E, Haymaker J, Sapkota AR, Sharma M⁺. Prevalence of *Escherichia coli, Salmonella spp., and Listeria monocytogenes* in nontraditional irrigation waters in the Mid-Atlantic United States: A CONSERVE project. Poster Presentation, International Association for Food Protection Annual Meeting. Tampa, FL. July 9-12, 2017.
- 56. Haymaker J*, Hashem F, Parveen S, May E, Sharma M, White C, Micallef S, Taaabodi M, Sapkota AR⁺. Screening of non-traditional irrigation water sources for Shiga toxin-producing *Escherichia coli* in the Mid-Atlantic region of the United States: A CONSERVE study. Poster Presentation, International Association for Food Protection Annual Meeting. Tampa, FL. July 9-12, 2017.
- Smyth EM**, Chattopadhyay S, Malayil L*, Chopyk J*, Hittle L, Clark PI, Mongodin EF, Sapkota, AR.
 A. From a Tobacco Microbiota Standpoint, Are Little Cigars Just Cigarettes? Poster presentation.
 Tobacco Centers of Regulatory Science Grantee Meeting, October 23-24, 2017, Bethesda, MD.
- 58. Chopyk J*, Nasko DJ, Chattopadhyay S, Malayil L*, Kulkarni P*, Smyth EM**, Hittle LE, Clark P, Mongodin EF, Sapkota AR. Agricultural freshwater pond supports diverse and dynamic bacterial and viral populations. Poster Presentation. Global Food Security. Cape Town, South Africa. December 4, 2017.
- 59. Smyth EM**, Chattopadhyay S, Malayil L*, Chopyk J*, Hittle L, Clark PI, Mongodin EF, Sapkota AR. From a Tobacco Microbiota Standpoint, Are Little Cigars Just Cigarettes? Poster presentation. 24th Annual Meeting of the Society for Research on Nicotine and Tobacco, February 21-24, 2018, Baltimore, MD.
- 60. Chopyk J*, Nasko DJ**, Chattopadhyay S, Malayil L*, Kulkarni P**, Smyth EM**, Hittle LE, Clark P, Mongodin EF, Sapkota AR. Bacterial and viral interactions within the oral cavity of tobacco-users. Poster Presentation. 24th Annual Meeting of the Society for Research on Nicotine and Tobacco, February 21-24, 2018, Baltimore, MD.
- 61. Chattopadhyay S, Malayil L, **Sapkota AR**, Mongodin EF. Nicotine affects the composition of tobacco bacterial communities in cigarettes. Poster Presentation. 24th Annual Meeting of the Society for Research on Nicotine and Tobacco, February 21-24, 2018, Baltimore, MD.
- 62. Craddock H, Jones K, Lipchin C, and **Sapkota AR.** Consumer knowledge and perceptions regarding recycled irrigation water in Maryland. Nexus 2018: Water, Food, Energy & Climate. Chapel Hill, NC. April 16 18, 2018.
- 63. Malayil L, Chattopadhyay S, Kelbick HAC, Smyth EM, Hittle L, Mongodin EM, Hashibe M, Sapkota A, **Sapkota AR**. Exploring the Impacts of Oral Microbiota on Lung Cancer Risk in Nepal. Poster and Oral Presentation. American Society of Microbiology, ASM Microbe, Atlanta, GA, June 7-11, 2018.
- 64. Allard S, Callahan MT, Bui A, Ferelli A, Chopyk J, Micallef S, **Sapkota AR**. Creek to Table: Investigating the movement of fecal indicators, bacterial pathogens, and total bacterial communities through

creek water irrigation of kale and radishes. Submitted for Oral Presentation. International Association for Food Protection (IAFP). Salt Lake City, UT. July 8-11, 2018.

- 65. Solaiman S, Callahan MT, Allard S, Handy E, East C, Kulkarni P, Murray R, Bui A, Haymaker J, Gartley S, May E, Hashem F, Parveen S, Kniel K, Sharma M, Sapkota AR, Micallef SA. Prevalence of Fecal Indicator Bacteria in Surface and Recycled Water: A Conserve Study. Poster presentation. International Association for Food Protection (IAFP) Annual Meeting, July 2018.
- 66. Solaiman S, Callahan MT, Sharma M, Sapkota AR, Micallef SA. Pathogenicity of Aeromonas spp. Isolated from Surface and Recycled Water and Transfer Potential to Lettuce: A Conserve Study. Poster presentation. International Association for Food Protection (IAFP) Annual Meeting, July 2018.
- 67. Shani Craighead, Brienna Anderson, Adam Vanore, Samantha Gartley, Walter Betancourt, Charles Gerba, Derek Foust, Rico Duncan, Chanelle White, Eric May, Salina Parveen, Fawzy Hashem, Sarah Allard, Mary Theresa Callahan, Shirley A. Micallef, **Amy Sapkota**, Kalmia Kniel. A Comparison of the Prevalence of Protozoan Parasites in Potential Alternative Sources of Agricultural Water. Poster presentation. International Association for Food Protection (IAFP) Annual Meeting, July 2018.
- 68. Anthony Bui, Sarah Allard, Sultana Solaiman, Mary Theresa Callahan, Hillary Craddock, Rianna Murray, Joseph Haymaker, Derek Foust, Rico Duncan, Maryam Taabodi, Samantha Gartley, Adam Vanore, Eric May, Fawzy Hashem, Salina Parveen, Kalmia Kniel, Manan Sharma, Eric Handy, Cheryl East, **Amy Sapkota**. Prevalence of Generic *Escherichia coli* in Mid-Atlantic Surface and Recycled Irrigation Water Sources and Comparison to Food Safety Modernization Act Water Quality Standards: A Conserve Study. Poster presentation. International Association for Food Protection (IAFP) Annual Meeting, July 2018.
- 69. Brienna Anderson, Shani Craighead, Sarah Allard, Suraj Panthi, Adam Vanore, Samantha Gartley, Joseph Haymaker, Derek Foust, Rico Duncan, Chanelle White, Mary Theresa Callahan, Rianna Murray, Fawzy Hashem, Salina Parveen, Eric May, **Amy Sapkota**, Shirley A. Micallef, Manan Sharma. Presence of Viral, Bacterial, and Chemical Indicators in Recycled, Surface, and Processing Water Used for Crop Irrigation. Poster presentation. International Association for Food Protection (IAFP) Annual Meeting, July 2018.
- 70. Eric Handy, Cheryl East, Prachi Kulkarni, Rhodel Bradshaw, Mary Theresa Callahan, Sarah Allard, Shirley A. Micallef, Shani Craighead, Brienna Anderson, Adam Vanore, Samantha Gartley, Kalmia Kniel, Joseph Haymaker, Fawzy Hashem, Salina Parveen, Eric May, **Amy Sapkota**, Manan Sharma. Prevalence of *Salmonella* spp., *Listeria monocytogenes*, and *Escherichia coli* in Irrigation Water Sources in the Mid-Atlantic United States: A Conserve Project —Poster presentation. International Association for Food Protection (IAFP) Annual Meeting, July 2018.
- 71. Chanelle White, Fawzy Hashem, Salina Parveen, Eric May, Joseph Haymaker, Eric Handy, Cheryl East, Sarah Allard, Shirley A. Micallef, Manan Sharma, Kalmia Kniel, **Amy Sapkota.** Occurrence of *Salmonella* and *Listeria monocytogenes* in Alternative Irrigation Water Sources on the Eastern Shore of Maryland: A Conserve Study. Poster presentation. International Association for Food Protection (IAFP) Annual Meeting, July 2018.
- 72. E. T. Handy, C. L. East, M. Callahan, S. Solaiman, S. Micallef, R. Murray, A. Bui, S. Allard, A. R. Sapkota, S. Gartley, S. Craighead, B. Anderson, A. Vanore, K. E. Kniel, J. Haymaker, C. White, S. Parveen, L. Goodridge, E. B. May, F. Hashem, A. Colvecchio, M. Sharma. Phylogenetic Diversity of *Escherichia coli* Isolated from Mid-Atlantic Irrigation Water Sources: A Conserve Project. Poster presentation. ASM Microbe Annual Meeting, June 2018.
- 73. S. Craighead, B. Anderson, A. Vanore, S. Gartley, W. Betancourt, C. Gerba, J. Haymaker, C. White, D. Foust, R. Duncan, E. May, S. Parveen, F. Hashem, S. Allard, M. Callahan, S. Micallef, **A. Sapkota**, K.

Kniel. The Prevalence of Human Enteric Viruses and Protozoa in Non-Traditional Agricultural Water. Poster presentation. ASM Microbe Annual Meeting, June 2018.

- 74. Murray R*, Cruz-Cano R, Nasko D, Wilson S, Sapkota A. Association between Private Drinking Water Wells and the Incidence of Campylobacteriosis in Maryland: An Ecological Analysis Using Data from the Foodborne Diseases Active Surveillance Network (FoodNet). International Society of Exposure Science (ISES) & International Society for Environmental Epidemiology (ISEE) Joint Annual Meeting, Ottawa, Canada, August 2018.
- 75. Malayil L, Chattopadhyay S, Smyth EM, Chopyk J, Hittle L, Mongodin EF, Clark PI, **Sapkota AR.** Poster Presentation. Distinct oral bacterial communities observed between tobacco users and non-users: a longitudinal oral microbiome study. International Symposium for Microbial Ecology, ISME2017, Leipzig, Germany, August 12-17, 2018.
- 76. Chopyk J, Nasko DJ, Allard SM, Bui A, Treangen TJ, Pop M, Mongodin EF, **Sapkota AR**. Environmental and temporal heterogeneity influence microbial community structure and phage-host relationships in surface and reclaimed waters. Poster Presentation. 17th International Symposium on Microbial Ecology. Leipzig, Germany. August 12-17, 2018.
- 77. Craddock HA, Chattopadhyay S, Rjoub Y, Rosen D, Greif J, Lipchin C, Mongodin E, **Sapkota AR**. Microbiological Quality of Treated Household Greywater, Palestinian Territories. Oral presentation. UNC Water Microbiology Conference, Chapel Hill, NC. May 14-16, 2019.
- 78. Malayil L, Ramachandran P, Chattopadhyay S, Cagle R, Hittle L, Ottesen A, Mongodin EF, Sapkota AR. Enumerating metabolically active bacteria in reclaimed water and pond water used for agricultural irrigation in Mid-Atlantic, United States. Poster and Oral Presentation. American Society of Microbiology, ASM Microbe, San Francisco, CA Jun 20-24, 2019.
- 79. Chattopadhyay S, Malayil L, Hittle LE, Mongodin EF, **Sapkota AR**. Source tracking microbial communities from rooftop harvested rainwater to irrigated soil and produce. Oral presentation. UNC Water & Health Conference, Chapel Hill, NC. Oct 7-11, 2019.
- 80. Malayil L, Chattopadhyay S, Hittle LE, Mongodin EF, **Sapkota AR.** Enumerating viable-but-nonculturable *Vibrio* spp. in irrigation water sources in the Chesapeake Bay watershed: A coupled labeling and sequencing approach that can be applied to bolster resilience in agricultural communities. Oral presentation. UNC Water & Health Conference, Chapel Hill, NC. Oct 7-11, 2019.
- Murray R, Cruz-Cano R, Nasko, D, Blythe D, Boyle M, Ryan P, Wilson S, Sapkota AR. Prevalence of Private Drinking Water Wells Impacts Salmonellosis Incidence in Maryland, USA: An Ecological Analysis Using FoodNet Data (2007-2016). Oral presentation. UNC Water & Health Conference, Chapel Hill, NC. Oct 7-11, 2019.
- 82. Malayil L, Chattopadhyay S, Hittle LE, Mongodin EF, Allard SM, Rosenberg Goldstein RE, Sapkota AR. Source tracking metabolically-active bacterial communities from rooftop harvested rainwater to irrigated soil and produce. Poster presentation. International Association for Food Protection (IAFP) Virtual Annual Meeting. Oct 26-28, 2020.
- Chattopadhyay S, Malayil L, Hittle LE, Mongodin EF, Sapkota AR. Coupled DNA-labeling and Sequencing approach enables the detection of viable but non-culturable *Vibrio* spp. in irrigation water sources in the Chesapeake Bay Watershed. Poster presentation. International Association for Food Protection (IAFP) Virtual Annual Meeting. Oct 26-28, 2020.
- 84. Murray R, Marbach-Ad G, Ferelli AM, **Sapkota AR**. UMD Global STEWARDS National Science Foundation Research Traineeship prepares future leaders at the food-energy-water nexus through

innovative international experiences. Poster presentation. American Public Health Association (APHA) Virtual Annual Meeting, October 2020.

- Murray R, Marbach-Ad G, Lansing S, Sapkota AR. The University of Maryland (UMD) Global STEWARDS NSF Research Traineeship program: Preparing future changemakers at the Food-Energy-Water (FEW) Nexus. Poster presentation. American Public Health Association (APHA)Virtual Annual Meeting, October 2020.
- 86. Goldstein RR., Hudson C, Malayil L, Chattopadhyay S, Ta K, Jeffries N, Reed J, Allard S, Sharma M, Sapkota AR, Williams M, Brooks K, Lazur A, Traunfeld J, Little N. Rooftop Runoff Irrigation Produce Eaten Raw (RRIPER): A Series of Community-Driven Projects to Evaluate the Safety of Harvested Rainwater as an Irrigation Source. American Water Resources Association; Nov 9-12, 2020.
- 87. Malayil L, Chattopadhyay S, Mongodin EF, **Sapkota AR**. Comparison of Commonly Used DNA Labels Coupled with Sequencing Techniques to Detect Metabolically-active Bacteria in Environmental Samples. Oral and poster presentation. ASM Conference on Rapid Applied Microbial Next-Generation Sequencing and Bioinformatic Pipelines. Dec 7-11, 2020.
- 88. Malayil L, Chattopadhyay S, Hittle LE, Mongodin EF, Allard SM, Rosenberg Goldstein RE, **Sapkota AR**. Source tracking metabolically-active bacterial communities from rooftop harvested rainwater to produce. Oral presentation. NCSE Drawdown virtual meeting. Jan 5-9, 2021.
- 89. Malayil L, Chattopadhyay S Bui A, Panse M, Cagle R, Mongodin EF, **Sapkota AR**. Detection of Viable Bacteria in Mainstream Cigarette Smoke. Poster presentation. Society for Research on Nicotine and Tobacco (SRNT) 2021 Annual Meeting. Feb 24-27, 2021.
- Chattopadhyay S, Malayil L, Hittle LE, Mongodin EF, Sapkota AR. Dysbiosis of the oral microbiota is specific to tobacco product used. Oral presentation. Society for Research on Nicotine and Tobacco (SRNT) 2021 Annual Meeting. Feb 24-27, 2021.
- 91. Malayil L, Negahban-Azar M, Goldstein RR, Sharma M, Gleason J, Muise A, Murray R, **Sapkota AR**. "Zoom"ing Our Way Through Virtual Undergraduate Laboratory Internships in a Pandemic Summer. Poster presentation. Annual Consortium of Universities for Global Health Conference (CUGH), March 12-14, 2021. Virtual meeting.
- 92. Chattopadhyay S, Allard S, Bui A, Malayil L, Sharma M, Kniel K, Micallef S, Hashem F, Parveen S, May E, Sapkota A, Pop M, Callahan MT, Craddock H, Murray R, East C, Handy E, Kulkarni P, Anderson B, Craighead S, Gartley S, Vanore A, Duncan R, Foust D, Haymaker J, Mongodin E, Sapkota A. Applying sequencing approaches to improve understanding of the microbial risks associated with agricultural water reuse. Poster presentation. Annual Consortium of Universities for Global Health Conference (CUGH), March 12-14, 2021. Virtual meeting.
- 93. Chattopadhyay S, Malayil L, Bui A, Panse M, Cagle R, Mongodin EF, **Sapkota AR**. Tobacco-associated bacteria survive the cigarette combustion process and remain viable in mainstream smoke. Consortium of Universities for Global Health (CUGH), Mar 12-14, 2021. Virtual meeting.
- 94. Chattopadhyay S, Allard S, Bui A, Malayil L, Sharma M, Kniel K, Micallef S, Hashem F, Parveen S, May E, Sapkota A, Pop M, Callahan MT, Craddock H, Murray R, East C, Handy E, Kulkarni P, Anderson B, Craighead S, Gartley S, Vanore A, Duncan R, Foust D, Haymaker J, Mongodin E, Sapkota AR. Applying Sequencing Approaches to Comprehensively Characterize the Microbiological Quality of Non-Traditional Water Sources Used for Food Crop Irrigation: A Conserve 2-Year Field Study. International Association for Food Protection (IAFP) European Symposium on Food Safety, April 27-28, 2021. Virtual meeting. Oral presentation.

- 95. Malayil L, Allard S, Bui A, Chattopadhyay S, Sharma M, Kniel K, Micallef S, Hashem F, Parveen S, May E, Sapkota A, Pop M, Callahan MT, Craddock H, Murray R, East C, Handy E, Kulkarni P, Anderson B, Craighead S, Gartley S, Vanore A, Duncan R, Foust D, Haymaker J, Mongodin EF, Sapkota AR. Characterizing the microbiological quality of non-traditional irrigation water sources through sequencing-based approaches: A CONSERVE 2-year field study. Oral presentation. World Microbe Forum. June 20-24, 2021.
- 96. Chattopadhyay S, Zhu L, Akanbi OE, Lobo S, Sapkota A, Mongodin EF, Chiu PC, **Sapkota AR**. Biochar and zero-valent iron-based sand filters reduce chemical and microbiological contaminants in wastewater effluent: A CONSERVE study. World Microbe Forum, June 20-24, 2021. Virtual meeting.
- Murray RT, McKee K, Marbach-Ad G, Lansing S, Sapkota AR. A curricular model to train doctoral students in interdisciplinary collaborative research at the food-energy-water nexus.
 2022 NARST Annual International Conference, Vancouver, British Columbia, Canada. March 27-30, 2022.
- 98. Chattopadhyay S, Malayil L, Buehler S, Mongodin EF, **Sapkota AR**. Transient temporal stability of the oral microbiome after a single use of little cigars and traditional cigarettes. American Society of Microbiology: Microbe, Washington, DC. June 9-13, 2022
- 99. Malayil L, Chattopadhyay S, Mongodin EF, **Sapkota AR**. Dysbiosis of the oral microbiota is specific to tobacco products used. American Society of Microbiology: Microbe, Washington, DC Jun 9-13, 2022. Poster Presentation
- 100. Morgado ME, Hudson CL, Chattopadhyay S, Ta K, East C, Purser N, Allard S, Drew FM, Speierman E, Sapkota AR, Sharma M, Goldstein RR. The effect of a first flush rainwater harvesting and subsurface irrigation system on E. coli and pathogen concentrations in irrigation water, soil, and produce, *American Ecological Engineering Society*, June 21-23, 2022, University of Maryland, Baltimore, MD.
- 101. Chattopadhyay S, Zhu L, Akanbi OE, Lobo S, Malayil L, Sapkota A, Mongodin EF, Chiu PC, Sapkota AR. Differences in the removal of chemical and bacterial contaminants from wastewater effluent using sand-based filters with zerovalent iron versus biochar. International Association for Food Protection (IAFP), Pittsburgh, PA. July 31- Aug 3, 2022.
- 102. Malayil L, Chattopadhyay S, Ramachandran P, Walsky T, Merenstein Z, Morgado M, Murray R, Pettit R, Sripathi N, Grim C, Glass J, Mohaved Z, Movahed B, Davis AP, Sapkota A, Sapkota AR. A pilot membrane-based indirect potable reuse treatment system effectively removes microorganisms from recycled wastewater in Westminster, Maryland, U.S.A. University of North Carolina's Water & Health Conference, Chapel Hill, NC. Oct 24-28, 2022.
- 103. Chattopadhyay S, Malayil L, Mongodin EF, **Sapkota AR**. Distinct oral bacterial communities observed between tobacco users and non-users: a longitudinal oral microbiome study. American Public Health Association (APHA), Delta Omega Student Poster Session, Boston, MA, Nov 6-9, 2022.

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1. **Sapkota AR†**, Ojo KK, Roberts MC, Schwab KJ. Prevalence of macrolide, lincosamide, streptogramin and tetracycline resistance genes in airborne gram-positive bacteria recovered from a concentrated swine feeding operation. Poster presentation. College Research Interaction Day. University of Maryland School of Public Health. 2007.

- Kinney EL*, Kim A[#], Joseph SW, Hulet M, McDermott P, Sapkota AR[†]. Isolation identification and antimicrobial susceptibility of *Enterococcus* spp. from conventional poultry farms transitioning to organic farming practices. Poster Presentation. Graduate Research Interaction Day. University of Maryland School of Public Health. September 2009.
- 3. **Sapkota AR[†]**, Berger S, Vogel, TM. Human pathogens abundant in the bacterial metagenome of cigarettes. Poster Presentation. Graduate Research Interaction Day. University of Maryland School of Public Health. September 2009.
- 4. Rosenberg Goldstein RE*, Micallef SA**, George A[#], Sapkota A, Gibbs SG, Joseph SW, **Sapkota AR**[†]. Irrigation workers' exposures to antimicrobial-resistant bacteria and antimicrobials present in reclaimed wastewater. Poster Presentation. University of Maryland Bioscience & Technology Review Day. College Park, MD. November 2009.
- 5. **Sapkota AR[†]**, Berger S, Vogel, TM. Human pathogens abundant in the bacterial metagenome of cigarettes. Poster Presentation. Crosstalk: Across cells, across campuses. University of Maryland College Park and University of Maryland School of Medicine. College Park, MD. January 2010.
- Rosenberg Goldstein RE*, Micallef SA**, George A[#], Sapkota A, Gibbs SG, Joseph SW, Sapkota AR[†]. Antibiotic-resistant bacteria in wastewater and resulting occupational exposures. Oral presentation by RE Rosenberg Goldstein. The Clark School of Engineering Sustainability Workshop. University of Maryland College Park. College Park, MD. April 2010.
- 7. Rosenberg Goldstein RE*, Micallef SA**, George A[#], Sapkota A, Gibbs SG, Joseph SW, Sapkota AR[†]. Survival of methicillin-resistant *Staphylococcus aureus* in secondary treated wastewater. Oral presentation by RE Rosenberg Goldstein. Graduate Research Interaction Day. University of Maryland School of Public Health. College Park, MD. April 2011.
- 8. Lilly A*, **Sapkota AR**, Mudd C, Ferguson S, Shelton D, Ingram DT, and Sharma M⁺. Persistence of somatic and f-specific coliphages, potential indicators of fecal contamination, on spinach foliar tissue. Poster Presentation. Graduate Research Interaction Day. University of Maryland School of Public Health. College Park, MD. April 2011.
- 9. Lilly A*, **Sapkota AR**, Mudd C, Ferguson S, Shelton D, Ingram DT, and Sharma M⁺. Persistence of somatic and f-specific coliphages, potential indicators of fecal contamination, on spinach foliar tissue. Poster Presentation. U.S. Department of Agriculture, Beltsville Agricultural Research Center Poster Day. Beltsville, MD. April 2011.
- Rosenberg Goldstein RE*, Micallef SA**, George A#, Sapkota A, Gibbs SG, Joseph SW, Sapkota AR⁺. Survival of Methicillin-resistant *Staphylococcus aureus* in secondary treated wastewater. Poster Presentation. University of Maryland Bioscience & Technology Review Day. College Park, MD. November 2011.
- 11. Rosenberg Goldstein RE*, Aspinwall K, Pee D, Maring L, **Sapkota AR†.** Analysis of Private Well Water Quality and Well Owner Education Program in Maryland: A Pilot Project. Poster Presentation. School of Public Health Research Interaction Day. October 2012.
- 12. Rosenberg Goldstein RE*, Aspinwall K, Pee D, Maring L, **Sapkota AR†.** Analysis of Private Well Water Quality and Well Owner Education Program in Maryland: A Pilot Project. Poster Presentation. University of Maryland Bioscience & Technology Review Day. College Park, MD. November 2012.
- 13. Pasturel BZ*, Cruz-Cano R, Rosenberg Goldstein RE*, Palmer A, Blythe D, Ryan P, Hogan B, Jung C, Joseph SW, Wang MQ, Ting Lee ML, Puett R and **Sapkota AR**⁺. Socioeconomic and environmental

disparities in the risk of campylobacteriosis in Maryland. Poster presentation. Public Health Research @ Maryland. College Park, MD. April 2013.

- Manchisi KK, Aspinwall K, Maring EF, Rosenberg Goldstein RE*, Sapkota AR, Pee D, McCoy T. Needs assessment survey of a private well water quality and well owner education program in Maryland: Initial analysis and findings. Poster presentation. Public Health Research @ Maryland. College Park, MD. April 2013.
- Kulkarni P*, Claye E, Rosenberg Goldstein RE*, Gibbs SG, Pop M, Cummings M, Maddox C, Mongodin EF, Sapkota AR⁺. Evaluating the bacterial microbiota of reclaimed water using next generation sequencing. Poster presentation. Public Health Research @ Maryland. College Park, MD. April 2014.
- 16. Smyth EM**, Reid M*, Chattopadhyay S, Kulkarni P*, Babik K*, Hittle L, Paulson J*, Perlmutter R, Bylthe D, Pop M, Mongodin EF, Sapkota AR⁺. Microbial diversity of stool samples from patients diagnosed with *Clostridium difficile* infection. Poster Presentation. Public Health Research @ Maryland. College Park, MD. April 2015.
- 17. Murray R, Pee D, Rosenberg Goldstein R*, Claye E, Aspinwall K, **Sapkota AR**⁺. Well water quality in Maryland: Results of a pilot study to analyze private drinking water wells and educate homeowners. Poster Presentation. Public Health Research @ Maryland. College Park, MD. April 2015.
- Soneja S**, Jiang C, Mitchell C, Bylthe D, Sapkota AR⁺, Sapkota A⁺. Does the frequency of extreme weather events impact campylobacteriosis risk? Poster Presentation. Public Health Research @ Maryland. College Park, MD. April 2015.
- 19. Jiang C, Shaw KS^{**}, Romeo C^{*}, Blythe D, Mitchell C, Murtugudde R, **Sapkota AR**[†], Sapkota A[†]. Climate change, extreme events and salmonellosis: Are coastal areas truly vulnerable? Public Health Research @ Maryland. College Park, MD. April 2015.
- Soneja S**, Jiang C, Blythe D, Mitchell C, Sapkota AR, Sapkota A. Does the frequency of extreme weather events impact campylobacteriosis risk? Poster Presentation, University of Maryland, Public Health Research Symposium on The Changing Climate and Health. College Park, Maryland. April 8, 2015.
- Craddock HA*, Cruz-Cano R, Jiang C, Blythe D, Ryan P, Sapkota AR⁺. Agricultural and socioeconomic factors influence rates of *Shigella* infection: Foodborne Diseases Active Surveillance Network (FoodNet), 2004-2010. Poster Presentation. University of Maryland Bioscience Day. College Park, MD. November 19, 2015.
- Kulkarni P*, Claye E, Rosenberg Goldstein RE**, Gibbs SG, Pop M, Cummings M, Maddox C, Mongodin EF, Sapkota AR⁺. Evaluating the bacterial microbiota of reclaimed water using next generation sequencing. Poster presentation. University of Maryland Bioscience Day. College Park, MD. November 19, 2015.
- 23. Chopyk J*, Chattopadhyay S, Kulkarni P*, Claye E, Babik KR*, Smyth EM**, Hittle LE, Paulson JN, Cruz-Cano R, Pop M, Clark P, Mongolian EF, Sapkota AR⁺. From Pre-harvest to Puff: Bacterial community composition differs between mentholated and non-mentholated cigarette tobacco. Poster Presentation. University of Maryland Bioscience Day. College Park, MD. November 19, 2015.
- Craddock HA*, Cruz-Cano R, Jiang C, Blythe D, Ryan P, Sapkota AR⁺. Agricultural and socioeconomic factors influence rates of Shigella infection: Foodborne Diseases Active Surveillance Network (FoodNet), 2004-2010. Poster Presentation. University of Maryland Public Health Research Day. College Park, MD. April 5, 2016.

- 25. Chopyk J*, Chattopadhyay S, Kulkarni P*, Smyth EM**, Hittle LE, Paulson JN, Cruz-Cano R, Pop M, Clark P, Mongolian EF, **Sapkota AR**[†]. Brand, mentholation status and storage conditions influence the bacterial microbiota of cigarette tobacco. Poster Presentation. Public Health Research Maryland. College Park, MD. April 5, 2016.
- Craddock HA*, Cruz-Cano R, Jiang C, Blythe D, Ryan P, Sapkota AR⁺. Agricultural and socioeconomic factors influence rates of Shigella infection: Foodborne Diseases Active Surveillance Network (FoodNet), 2004-2010. Poster Presentation. University of Maryland Graduate Research Appreciation Day. College Park, MD. April 6, 2016.
- 27. Smyth EM**, Chattopadhyay S, Hittle L, Claye E, Kulkarni P*, Mongodin EF, **Sapkota AR**⁺. The bacterial microbiota of little cigar tobacco and wrapper. Poster Presentation. University of Maryland Bioscience Day. College Park, Maryland. October 25, 2016.
- 28. Malayil L*, Chattopadyay S, Smyth EM**, Chopyk J*, Pop M, Clark PI, **Sapkota AR**, Mongodin EF. Brand-specific alteration of the bacterial microbiota by mentholation of commercial cigarette products. Poster Presentation. University of Maryland Bioscience Day. College Park, Maryland. October 25, 2016.
- 29. Chopyk J*, Chattopadhyay S, Kulkarni P*, Smyth EM**, Hittle LE, Paulson JN, Pop M, Clark PI, Mongolian EF, **Sapkota AR**⁺. Influence of brand, mentholation and storage conditions on the bacterial microbiota of cigarette tobacco. Poster Presentation. University of Maryland Bioscience Day. College Park, Maryland. October 25, 2016.
- Kulkarni P*, Olson N*, Paulson JN, Pop M, Maddox C, Mongodin EF⁺, Sapkota AR⁺. U.S. Wastewater and Reclaimed Water Harbor Diverse and Dynamic Bacterial Communities Throughout Treatment and Storage Processes. Poster presentation. University of Maryland Bioscience Day. College Park, Maryland. October 25, 2016.
- 31. Kulkarni P*, Olson N*, Raspanti G**, Sapkota A, **Sapkota AR**⁺. Occurrence of antibiotic residues in wastewater and reclaimed water in the United States. Poster presentation. University of Maryland Bioscience Day. College Park, Maryland. October 25, 2016.
- 32. Cagle R[#], Williams R[#], Panse M[#], Rundhawa S[#], Bui A, Chopyk J^{*}, Allard S^{**}, Mongodin EF, **Sapkota AR**⁺. Stayin' alive: Culturable *Staphylococcus, Pseudomonas,* and *Enterococcus* are likely present in tobacco products. Poster Presentation. University of Maryland Public Health Research Day. College Park, MD. April 6, 2017.
- Malayil L*, Chattopadhyay S, Smyth EM**, Chopyk J*, Pop M, Clark PI, Sapkota AR⁺, Mongodin EF⁺. Brand-specific alteration of the bacterial microbiota by mentholation of commercial cigarette products. Poster Presentation. University of Maryland Public Health Research Day. College Park, MD. April 6, 2017.
- 34. Cagle R[#], Williams R[#], Panse M[#], Rundhawa S[#], Bui A, Chopyk J^{*}, Allard S^{**}, Mongodin EF, Sapkota AR⁺. Stayin' alive: Culturable *Staphylococcus, Pseudomonas,* and *Enterococcus* are likely present in tobacco products. Poster Presentation. University of Maryland Undergraduate Research Day. College Park, MD. April 26, 2017.
- 35. Kulkarni P*, Raspanti G**, Bui AQ, Bradshaw RN*, Handy ET, Kniel KE, Coppock C, Sharma M, Sapkota A, **Sapkota AR**⁺. Zero-valent iron-biosand filtration is capable of reducing antimicrobial and generic *E. coli* in unbuffered conventionally treated reclaimed water. A CONSERVE Project. Poster Presentation. 28th Annual Beltsville Poster Day. Beltsville, MD. April 26, 2017.

- 36. Chopyk J*, Nasko DJ, Malayil L*, Chattopadhyay S, Kulkarni P*, Smyth EM**, Hittle LE, Clark P, Mongolian EF, Sapkota AR⁺. Bacterial and viral interactions within the oral cavity of tobacco-users. Oral Presentation. Mid-Atlantic Microbiome Meet-up. College Park, Maryland. May 8, 2017.
- 37. Chopyk J*, Nasko DJ, Malayil L*, Chattopadhyay S, Kulkarni P*, Smyth EM**, Hittle LE, Clark P, Mongolian EF, **Sapkota AR**⁺. A tale of two microbes: bacterial and viral interactions within the oral cavity of tobacco-users. COMBINE Symposium. College Park, Maryland. August 2017.
- 38. Cagle R, Panse M, Rundhawa S, Williams R, Bui A, Chopyk J, Allard S, Mongodin EF, **Sapkota AR**. Stayin' alive: Culturable Staphylococcus, Pseudomonas, and Enterococcus are likely present in tobacco products. Poster Presentation, University of Maryland Bioscience Day. College Park, MD. November 15, 2017.
- 39. Chopyk J*, Nasko DJ, Chattopadhyay S, Malayil L, Kulkarni P, Smyth EM, Hittle LE, Clark P, Mongodin EF, **Sapkota AR**. Bacterial and viral interactions within the oral cavity of tobacco-users. Poster Presentation. Bioscience Day. College Park, Maryland. November 16, 2017
- 40. Chopyk J*, Nasko DJ, Chattopadhyay S, Malayil L, Kulkarni P, Smyth EM, Hittle LE, Clark P, Mongodin EF, **Sapkota AR**. Agricultural freshwater pond supports diverse and dynamic bacterial and viral populations. Poster Presentation. Mid-Atlantic Microbiome Meet-up. College Park, Maryland. January 10, 2017.
- 41. Murray R, Wilson S, **Sapkota AR**. Association between Private Drinking Water Wells and the Incidence of Campylobacteriosis in Maryland: An Ecological Analysis Using a Decade of Data from the Foodborne Diseases Active Surveillance Network (FoodNet). Public Health Research at Maryland Day. College Park, MD. April 2018.
- 42. Chopyk J, Allard SM, Nasko DJ, Bui A, Mongodin EF, **Sapkota AR.** Agricultural freshwater pond supports diverse and dynamic bacterial and viral populations. Poster Presentation. University of Maryland Public Health Research Day. College Park, MD. April 3, 2018.
- 43. Craddock H, Rjoub Y, Rosen D, Grief J, Lipchin C, and **Sapkota AR.** Assessing the Safety and Efficacy of Agricultural Irrigation Water Produced by Small-Scale Greywater Treatment Systems in the West Bank, Palestine. Public Health Research Day at Maryland. College Park, MD. April 3, 2018.
- 44. Craddock H, Rjoub Y, Rosen D, Grief J, Lipchin C, and **Sapkota AR**. 2018. Assessing the Safety and Efficacy of Agricultural Irrigation Water Produced by Small-Scale Greywater Treatment Systems in the West Bank, Palestine. Graduate Research Appreciation Day. College Park, MD. April 4, 2018.
- 45. Chopyk J, Nasko DJ, Allard SM, Bui A, **Sapkota AR.** Exploring phage signals in nontraditional sources of water for irrigation. Oral Presentation. CHIB Workshop and COMBINE Symposium for Network Medicine. College Park, MD. May 17 2018.
- 46. Chopyk J, Nasko DJ, Allard SM, Bui A, **Sapkota AR.** Environmental and temporal heterogeneity influence microbial community structure and phage-host relationships in surface and reclaimed waters. Poster Presentation. CHIB Workshop and COMBINE Symposium for Network Medicine. College Park, MD. May 17. 2018.

- 47. Craddock H, Jones K, Lipchin C, and **Sapkota AR.** Consumer knowledge and perceptions regarding recycled irrigation water in Southern Israel. Global Water Reuse, Food, and Health Workshop. College Park, MD. October 8-9 2018.
- Craddock HA, Chattopadhyay S, Rjoub Y, Rosen D, Greif J, Lipchin C, Mongodin E, and Sapkota AR. Microbiological quality of treated household greywater, Palestinian Territories. Poster Presentation. Public Health Research Day. College Park, MD. April 2, 2019.
- 49. Morgado ME, Jiang C, Zambrana J, Upperman CR, Mitchell C, Boyle M, **Sapkota AR** and Sapkota, A. Climate change, extreme events, and increased risk of salmonellosis: Foodborne Diseases Active Surveillance Network (FoodNet), 2004-2014. 2021 Public Health Research @ Maryland, College Park, MD, Poster Presentation. April 13-15, 2021.

Grants and Contracts

<u>Active</u>

3/22-3/25	Global FEWture Alliance: Advancing Transformative Food-Energy-Water Solutions to
	Ensure Community Resilience in a Changing Climate
	Sponsor: University of Maryland Grand Challenges Institutional Grant Program
	Role: Principal Investigator and Director; Total costs: \$3,000,000

- 9/18-9/24UMD Global STEWARDS (STEM Training at the Nexus of Energy, WAter Reuse, and FooD
Systems) (Award #1828910)Sponsor: National Science Foundation, National Research Traineeship Program (NRT)
Role: Principal Investigator and Director; Total costs: \$3,000,000
- 9/20-9/25 Improving Agricultural Water Use and Nutrient Management to Sustain Food and Energy Crop Production in the Corn Belt (Award #2020-68012-31674) Sponsor: U.S. Department of Agriculture, National Institute of Food and Agriculture Role: **Co-Project Director (Co-Principal Investigator)**; Total Costs: **\$10,000,000**

Completed

- 9/21-9/22 Membrane Based Pilot System to Treat Municipal Wastewater for Indirect Potable Reuse Sponsor: U.S. Bureau of Reclamation Role: **Collaborator;** Total Costs: **\$150,000**
- 6/21-12/22 Advancing Food Security Via Harvested Rainwater in Nepal: A Research and Capacity Building Program Sponsor: The Conservation, Food and Health Foundation Role: **Co-Principal Investigator**; Total costs: **\$20,000**
- 3/16-3/21 CONSERVE: A Center of Excellence at the Nexus of Sustainable Water Reuse, Food and Health (Award #2016-68007-25064) Sponsor: U.S. Department of Agriculture, National Institute of Food and Agriculture Role: **Principal Investigator and Director** Co-Investigators: University of Maryland College Park: Shirley Micallef, Amir Sapkota, Masoud Negahban-Azar, Mihai Pop, Paul Goeringer, Rachel Rosenberg Goldstein; University of Maryland Eastern Shore: Fawzy Hashem; University of Maryland Baltimore: Emmanuel F. Mongodin, Michael Pappas, Robert Percival; USDA Agricultural Research Service: Manan Sharma; University of Delaware: Kalmia Kniel, Kent Messer; University of Arizona: Charles Gerba, Sadhana Ravishankar; New Mexico State University: Jeanne

Gleason, Barbara Chamberlin; Arava Institute for Environmental Studies: Clive Lipchin; CosmosID: Rita Colwell. Total Center Costs: \$10,000,000 1/18-1/19 Expanding water reuse for food production in off-grid communities Sponsor: University of Maryland, Vice President of Research Role: Principal Investigator; Total costs: \$50,000 6/18-10/18 Global Water Reuse, Food and Health Workshop Sponsor: U.S. Israel Bi-National Agricultural Research and Development Fund Role: Co-Principal Investigator (With Yael Mishael, Hebrew University of Jerusalem) Total workshop costs: \$45,000 9/13-8/18 Rapid Response Characterization of New and Manipulated Tobacco Products (P50 Center, P50CA180523) Sponsor: Funded by the Food and Drug Administration and administered by the National Institutes of Health/National Cancer Institute Total Center costs: \$18,777,000 (Pamela Clark, Center Principal Investigator) Role: Co-Principal Investigator on one R01 within the P50 Center, "Exploring tobacco microbial constituents and the oral microbiome of tobacco users" (Multiple PI Plan with Emmanuel F. Mongodin, PhD) Total R01 costs: **\$2,700,000** 9/14-9/17 Multiple projects supporting the Maryland Emerging Infections Program Projects: "Socioeconomic and environmental disparities in the risk of campylobacteriosis in the U.S.;" "Evaluating the influence of severe climate events on the incidence of salmonellosis in the U.S." Sponsor: Maryland Department of Health and Mental Hygiene (DHMH), Emerging **Infections Program** Role: Principal Investigator; Total costs: \$500,000 1/17-6/17 Fulbright Senior Researcher Scholarship, Nepal Influence of local tobacco use on the oral microbiota and lung cancer risk in Nepal Sponsor: U.S. Department of State Role: Principal Investigator; Total Stipend: \$16,500 9/13-9/14 Exploring 16S polymorphisms and in-home coal combustion exposures Sponsor: National Institutes of Health, National Cancer Institute (Sole Source Contract Renewal) Role: Principal Investigator; Total costs: \$25,000 6/12-9/14 Multiple projects supporting the Maryland Emerging Infections Program Projects: "Socioeconomic and environmental disparities in the risk of campylobacteriosis in Maryland;" "Evaluating the influence of severe climate events on the incidence of salmonellosis in Maryland" Sponsor: Maryland Department of Health and Mental Hygiene (DHMH), Emerging Infections Program Role: Principal Investigator; Total costs: \$400,680 6/13-6/14 Deep sequencing of mixed samples Sponsor: UMD, Center for Health Informatics and Bioimaging Role: Principal Investigator (Multiple PI Plan with Mihai Pop and Michael Cummings) Total costs: \$150,000

6/12-6/13	Maryland Well Water Program to Achieve Testing, Education and Research (WATER) Sponsor: University of Maryland, National Science Foundation, ADVANCE Program for Inclusive Excellence, Interdisciplinary and Engaged Research Seed Grants 2012. Role: Principal Investigator; Total costs: \$20,000
6/12-6/13	Role of product-specific bacterial communities in tobacco-specific nitrosamine (TSNA) formation and potential pathogenicity in smokeless tobacco products Sponsor: Centers for Disease Control and Prevention, National Center for Env. Health Role: Principal Investigator ; Total costs: \$150,000
9/11-9/12	Exploring 16S polymorphisms and in-home coal combustion exposures Sponsor: National Institutes of Health, National Cancer Institute Role: Principal Investigator ; Total costs: \$24,307
6/11-6/12	Maryland private well water education/safe drinking water clinics Sponsor: University of Maryland Extension Role: Co-investigator ; Total costs: \$9,840
9/10-9/11	Evaluation of F-RNA bacteriophages as potential alternative bacterial fecal indicators in environmental samples Sponsor: United States Department of Agriculture, Agricultural Research Service Role: Principal Investigator ; Total costs: \$36,032
6/09-6/12	Multiple projects supporting the Maryland Emerging Infections Program Projects: "Evaluating Public Health Impacts and Cost-Effectiveness of Implementing Good Agricultural Practices (GAPs) in the Tomato Farm Environment;" "Socioeconomic and environmental disparities in the risk of campylobacteriosis in Maryland." Sponsor: Maryland Department of Health and Mental Hygiene (DHMH), Emerging Infections Program Role: Principal Investigator ; Total costs: \$280,945
6/09-6/11	Irrigation workers' exposures to antibiotic-resistant bacteria and antimicrobials from reclaimed wastewater Sponsor: National Institute for Occupational Safety and Health, R03 Small Grants Program, Grant # 1-R03-OH009598-01 (score = 161, 11.5%) Role: Principal Investigator ; Total costs: \$150,000
7/08-7/10	Evaluating public health impacts and cost-effectiveness of implementing good agricultural practices (GAPs) in the tomato farm environment Sponsor: University of Maryland, Joint Institute for Food Safety and Applied Nutrition, funded by the U.S. Food and Drug Administration Role: Principal Investigator ; Total costs: \$225,000
9/07-9/08	Temporal changes in antibiotic resistance of Salmonella, Campylobacter and Enterococcus as conventional poultry farms transition to organic farms Sponsor: Center for a Livable Future, Johns Hopkins University Bloomberg School of Public Health Role: Principal Investigator ; Total costs: \$20,000
7/07-7/08	Design of a community health study of industrial food animal production of dairies in Yakima Valley, Washington Sponsor: Center for a Livable Future, Johns Hopkins University Bloomberg School of Public Health Role: Co-investigator ; Total costs: \$78,279

1/07-1/08	Matrices of the dispersion of antibiotic resistance genes in natural environments Sponsor : Agence Francais de Securite Sanitaire de l'Environnement et du Travail Role: Co-investigator ; Total costs: 100,000 Euros
4/04-4/05	Genetic characterization of antibiotic-resistant bacterial pathogens detected in air, water and lagoon samples collected at a concentrated animal feeding operation Sponsor: Center for a Livable Future, Johns Hopkins University Bloomberg School of Public Health Role: Co-investigator ; Total costs: \$25,000
4/03-4/04	Testing for antibiotic-resistant bacteria in environmental samples proximal to concentrated animal feeding operations (CAFOs) Sponsor: Center for a Livable Future, Johns Hopkins University Bloomberg School of Public Health Role: Co-investigator ; Total costs: \$25,000
8/02-5/03	Characterizing exposures to airborne antibiotic-resistant bacteria among DelMarVa chicken catchers and growers Sponsor: National Institute for Occupational Safety and Health, Education and Research Center, Pilot Project Research Training Award, Johns Hopkins University Bloomberg School of Public Health, Grant # T42CCT310419 Role: Co-investigator ; Total costs: \$8,000
4/02-4/03	Assessing the impact of a swine concentrated animal feeding operation (CAFO) on the air and water quality of a Maryland community Sponsor: Center for a Livable Future, Johns Hopkins University Bloomberg School of Public Health Role: Co-investigator ; Total costs: \$62,000
9/01-9/06	Assessing the relationship between antibiotic-resistant infections in humans and resistant microbes emitted into the environment from an industrial swine operation Sponsor: Howard Hughes Medical Institute Predoctoral Fellowship in Biological Sciences, Grant # 59003452 Role: Pre-doctoral Principal Investigator ; Total costs: \$185,000
9/00-9/01	Investigation of the impacts of concentrated animal feeding operations on groundwater and surface water quality Sponsor: Centers for Disease Control and Prevention Role: Principal Investigator ; Total costs: \$160,000
Honors and A	wards

- 1. Phi Sigma National Honor Society, 1994-97
- 2. Phi Kappa Phi National Honor Society, 1995-97
- 3. Golden Key National Honor Society, 1995-97
- 4. Phi Beta Kappa, University of Maryland College Park, May 1997
- 5. Gamma Award, Phi Beta Kappa, University of Maryland College Park, May 1997
- 6. National Network for Environmental Management Studies Fellowship, US EPA, 1998
- 7. Outstanding Employee Performance Award, Maryland Department of Health and Mental Hygiene, 2000
- 8. Cornelius W. Kruse Award for Outstanding Graduate Studies, Johns Hopkins, 2002
- 9. Delta Omega, Alpha Chapter, Honorary Public Health Society, 2005

- 10. Howard Hughes Medical Institute, Pre-doctoral Fellowship in Biological Sciences, 2001-2005
- 11. Eric Mood New Professional Award, Yale School of Public Health, 2012 (This award recognizes the career of a Yale alumnus/a who is a promising new professional in the field of public health, and who demonstrates outstanding leadership potential and creativity in the practice of public health.)
- 12. Honoree, 6th Annual University-Wide Celebration of Scholarship & Research, University of Maryland College Park, May 2013
- 13. Honoree, 7th Annual University-Wide Celebration of Scholarship & Research, University of Maryland College Park, May 2014
- 14. Honoree, 8th Annual University-Wide Celebration of Scholarship & Research, University of Maryland College Park, May 2015.
- 15. Jerry P. Wrenn Outstanding Service Award, University of Maryland School of Public Health, May 2015.
- 16. Honoree, 9th Annual University-Wide Celebration of Scholarship & Research, University of Maryland College Park, May 2016.
- 17. Fulbright Senior Researcher Scholarship, Nepal, U.S. Department of State, January to June 2017.
- 18. Research and Development Award, University of Maryland School of Public Health, May 2018.
- 19. Honoree, 11th Annual University-Wide Celebration of Scholarship & Research, University of Maryland College Park, May 2018.
- 20. Exemplary Researcher Recognition, Inaugural Maryland Research Excellence Celebration, University of Maryland College Park, February 2019.
- 21. Leda Amick Wilson Mentoring Award, University of Maryland School of Public Health, June 2019.
- 22. Honoree, Maryland Research Excellence Celebration, University of Maryland College Park, February 2020.
- 23. *MPower* Professorship, University of Maryland Strategic Partnership: MPowering the State, 2023-2025.
- 24. Woman of Influence Award. University of Maryland President's Commission on Women's Issues, April 2023.

Reviewing Activities

Manuscript Review for Peer-Reviewed Journals (listed alphabetically)

American Journal of Public Health Canadian Journal of Microbiology **Emerging Infectious Diseases Environmental Health Perspectives** Environmental Research Environmental Science & Technology International Journal of Hygiene and Environmental Health Journal of Applied Microbiology Journal of Environmental Quality Journal of Water and Health Journal of Infection in Developing Countries Letters in Applied Microbiology PLOS ONE Science of the Total Environment Zoonoses and Public Health Water Research

U.S./Israel Binational Agricultural Research Development (BARD) Fund, Summer 2019, Ad-hoc reviewer for 1 grant.

Applicant reviewer, Fulbright Commission, Nepal, Fulbright Foreign Student Program (15), May 2017

Panel reviewer, Gulf of Mexico Research Initiative (GoMRI), Request for Proposals IV (Consortiums), Full proposals (9), July 29, 2014

Ad-hoc reviewer, University of Maryland, National Science Foundation, ADVANCE Program for Inclusive Excellence, Interdisciplinary and Engaged Research Seed Grants, 2013 (1)

Ad-hoc reviewer, The United States-Israel Binational Agricultural Research and Development (BARD) Fund, 2013 (1)

Ad-hoc reviewer, National Science Foundation (NSF), Dimensions of Biodiversity Program, 2012 (1)

Teaching

Courses taught as the primary instructor in the last five years

Spring 2012	MIEH688	Seminar: Curr. Topics in Env. Occ. Hlth.	10 Students	1 credit
	MIEH785	Internship in Public Health	3 Students	3 credits
	MIEH786	Capstone Project in Public Health	1 Student	3 credits
	MIEH898	Pre-Candidacy Research	1 Student	2 credits
	MIEH789	Independent Study	1 Student	1 credit
	BSCI379G	CBMG Dept. Research	1 Student	3 credits
Fall 2012	MIEH773	Food-, Water-, Airborne Inf. Dis.	7 Students	3 credits
	MIEH785	Internship in Public Health	1 Student	3 credits
	MIEH789	Independent Study	1 Student	3 credits
	MIEH899	Doctoral Dissertation Research	1 Student	6 credits
Spring 2013	MIEH 609	Methods in Toxicology	1 Student	3 credits
	MIEH785	Internship in Public Health	1 Student	3 credits
	MIEH786	Capstone Project in Public Health	2 Students	3 credits
	MIEH899	Doctoral Dissertation Research	1 Student	2 credits
	MIEH789	Independent Study	1 Student	1 credit
	MIEH309	Research in Environmental Health	1 Student	2 credits
Fall 2013	MIEH773	Food-, Water-, Airborne Inf. Dis.	5 Students	3 credits
	MIEH785	Internship in Public Health	1 Student	3 credits
	MIEH799	Master's Thesis Research	1 Student	3 credits
	MIEH309	Research in Environmental Health	1 Student	2 credits
	BSCI379G	CBMG Dept. Research	1 Student	3 credits
Spring 2014	MIEH609	Methods in Toxicology	1 Student	3 credits
	MIEH785	Internship in Public Health	1 Student	3 credits
	MIEH786	Capstone Project in Public Health	1 Student	3 credits
	MIEH799	Master's Thesis Research	1 Student	3 credits

	MIEH309	Research in Environmental Health	3 Students	2 credits
Fall 2014	MIEH773 MIEH785 MIEH789 MIEH309 BSCI379G	Food-, Water-, Airborne Inf. Dis. Internship in Public Health Independent Study Research in Environmental Health CBMG Dept. Research	6 Students 3 Students 1 Student 2 Students 1 Student	3 credits 3 credits 3 credits 2 credits 3 credits
Spring 2015	MIEH 799 MIEH786 MIEH309	Master's Thesis Research Capstone Project in Public Health Research in Environmental Health	1 Student 3 Students 1 Student	6 credits 3 credits 2 credits
Summer 2015	MIEH 799 MIEH 785	Master's Thesis Research Internship in Public Health	1 Student 1 Student	1 credit 3 credits
Fall 2015	MIEH773 MIEH 609 MIEH309	Food-, Water-, Airborne Inf. Dis. Methods in Toxicology Research in Environmental Health	5 Students 1 Student 2 Student	3 credits 3 credits 2 credits
Spring 2016	MIEH 309 MIEH899	Research in Environmental Health Doctoral Dissertation Research	3 Students 1 Student	2 credits 3 credits
Fall 2016	MIEH 309 Course Waiver	Research in Environmental Health To develop newly funded Center	5 Students	3 credits
Spring 2017	Sabbatical	To complete Fulbright Senior Researche	er Scholarship in	Nepal
Fall 2017	MIEH773 MIEH309	Food-, Water-, Airborne Inf. Dis. Research in Environmental Health	5 Students 3 Students	3 credits 2 credits
Spring 2019	MIEH690	Experiential Exploration of Innovations at the Food-Energy-Water Nexus	12 Students	3 credits
Spring 2019	MIEH699	Seminal Findings and Research in Progress at the Food-Energy-Water Nex	12 Students kus	1 credit
Fall 2019	MIEH699	Seminal Findings and Research in Progress at the Food-Energy-Water Nex	12 Students kus	1 credit
Spring 2020	MIEH690	Experiential Exploration of Innovations at the Food-Energy-Water Nexus	11 Students	3 credits
Spring 2020	MIEH699	Seminal Findings and Research in Progress at the Food-Energy-Water Nex	11 Students kus	1 credit
Fall 2021	MIEH699	Seminal Findings and Research in Progress at the Food-Energy-Water Nex	11 Students kus	1 credit
Spring 2022	MIEH690	Experiential Exploration of Innovations at the Food-Energy-Water Nexus	12 Students	3 credits
Spring 2022	MIEH699	Seminal Findings and Research in Progress at the Food-Energy-Water Nex	12 Students kus	1 credit

Fall 2022	MIEH699	Seminal Findings and Research in Progress at the Food-Energy-Water Nex	11 Students xus	1 credit
Fall 2022	MIEH400	Introduction to Global Health	150 Students	3 credits
Spring 2023	MIEH690	Experiential Exploration of Innovations at the Food-Energy-Water Nexus	11 Students	3 credits
Course or Curr	iculum Developr	nent		
Training Program	-	developed 3 new courses for the UMD G ation Research Traineeship (NRT) program		
Overall		oles in curriculum development for MPH Health Sciences	and two PhD pr	ograms in
MIEH 773	Infectious Dise	aminants in the Environment (Now entit ases) ed the entire course from scratch.	led Food-, Wate	r-, and Airborne
MIEH 720	Principles of To Role: Develope	oxicology ed the entire course from scratch.		
MIEH698A/ MIEH688		nt Topics in Environmental and Occupatied seminar course from scratch.	ional Health	
MIEH785	Internship in P Role: Heavily re	ublic Health evamped internship program and handbo	ook for MPH in E	Env. Hlth.
MIEH786	• •	ect in Public Health revamped capstone project program and	handbook for N	ЛРН in Env. Hlth.
Guest Lectures	<u>i</u>			
MIEH 600	Principles of Er	nvironmental Health (One to two guest le	ectures each sen	nester)
MIEH 771	Exposure Asses	ssment of Environmental Hazards (One g	uest lecture eac	h semester)
FMSC280	Global, Child & each Fall seme	Family Health: Getting There Via E-Com ster)	munications (Or	ne guest lecture
HONR268C		r: Public Health Perspectives: How Does uest lecture each semester)	the Environmer	nt affect Human
Exchange Program	Technology and	xchange Program with Kyung Hee Univer d Public Health" (Summer Undergraduat rborne disease and hands-on field and la	e Program) (Two	guest lectures in

Mentoring and Advising

Undergraduate Research Advising

Neha Sripathi Spring 2022-Present; Major in Microbiology

John Yi	Spring 2022; Major in Public Health Science
Rayshaun Pettit	Fall 2021-Spring 2022; Major in Microbiology
Zachary Merenstein	Summer 2021-Spring 2022; Major in Government and Politics; Pre-med
Anji Cooper	Summer 2021; CONSERVE Summer Internship Program
Jicell Butron	Summer 2021; CONSERVE Summer Internship Program
Kaitlin Ta	Summer 2019; CONSERVE Summer Internship Program
Meg Shi Xiaoxuan	Summer 2018; CONSERVE Summer Internship Program
Lydia Ingabire	Summer 2017; CONSERVE Summer Internship Program
River Williams	Fall 2016-Fall 2018; Major in Public Health Science
Mansi Panse	Fall 2016-Fall 2018; Major in Neurobiology and Physiology
Robin Cagle	Spring 2016-Spring 2018; Major in Environmental Health; <u>Currently an ORISE</u> <u>Fellow at the Food and Drug Administration</u>
Shamar Rundhawa	Summer 2016-Spring 2018; Major in Biological Sciences
FIRE Team	Faculty Advisor to undergraduate First-year Innovation and Research Experience (FIRE) Team, Environmental Pathogens Stream, Summer 2016 and Beyond: Sydney Britton, Michael Digles, Sylvia Ejeh, Kasey Goon, Kylie Green, Gelila Haile, Zachary Holdsman, Madeline Hoover, Eda Kirsci, Zachary Korn, Seth Lattner, Jourdan Mansfield, Erica McGovern, Jasmine Namata, Olaedo Onuh, Alec Parsons, Priti Rayamajhi, Everett Richmond, Avinaash Sandu, Rachelle Sims, Alexander Walpole, Alec Walter
Anthony Bui	January 2016-Summer 2016; Major in Neurophysiology; continued working as a laboratory technician in my lab; <u>Currently has a full scholarship to complete a</u> <u>PhD in Microbiology at Cornell University</u>
Daniella Portal	Fall 2015-Present; Major in Public Health Sciences with a pre-professional concentration in Medicine
Isabel Burick	Fall 2014-Fall 2015; Major in Biology with a concentration in Neurobiology and Physiology; <u>Currently a Medical Resident.</u>
Jackie Taylor	Summer 2015, UM STARS Summer Program; Undergraduate student from UC Berkeley
Rhodel Bradshaw	Summer 2014 & 2015, UM STARS Summer Program; Undergraduate student at the University of the Virgin Islands; <u>Currently a Food Safety Specialist at the Association of Public Health Laboratories.</u>
Seong Park	Spring 2014; Major in Cell Biology and Molecular Genetics.
Arshom Foroutan	Fall 2013-Spring 2014; Major in Neurophysiology; Currently a Medical Resident.

Taylor Carter	Fall 2012-Spring 2013; Major in Cell Biology and Molecular Genetics; <u>Currently</u> working as a lab technician at the Institute of Marine and Environmental <u>Technology.</u>
Angeo Belen	Fall 2012-Summer 2014; Major in Cell Biology and Molecular Genetics; <u>Currently</u> <u>a Pharmacist.</u>
Deborah Jack	Spring 2012-Summer 2012; B.S. Cornell University; Post-Bac University of Maryland; <u>Went on to complete Medical School</u>
Victor Long	Spring 2011-Spring 2012; Major in Cell Biology and Molecular Genetics
Lara Kleinfelter	Spring 2010-Spring 2012; Major in Cell Biology and Molecular Genetics; Co- author on one published, peer-reviewed paper and one paper in revision; First author on manuscript to be submitted in Summer 2012; <u>Completed a PhD in</u> <u>Microbiology at Albert Einstein School of Medicine.</u>
Emma Claye	Spring 2011; Major in Cell Biology and Molecular Genetics; <u>Went on to complete</u> <u>a MPH degree at Yale University School of Public Health; Currently working as</u> <u>an epidemiologist with the New York City Health Department</u>
Nicole Schreiber	Fall 2010-Spring 2011; Major in Cell Biology and Molecular Genetics and Journalism; <u>Currently working as a Clinical Research Supervisor at Memorial</u> <u>Sloan Kettering Cancer Center</u>
Ariel Stoler	Spring 2010-Fall 2010; Major in Cell Biology and Molecular Genetics
Rachel Tran	Fall 2009; Major in Cell Biology and Molecular Genetics; <u>Went on to Physician</u> <u>Assistant school</u>
Zanetta Chang	Fall 2009; Major in Cell Biology and Molecular Genetics; <u>Went on to complete a</u> <u>PhD in Microbiology</u>
Ashish George	Spring 2009-Spring 2010; Major in Classics; Co-author on seven poster abstracts; Co-author on two published, peer-reviewed papers and one paper in revision; <u>Went on to complete Osteopathic Medical School; Currently a resident in</u> <u>Pediatrics at Women and Children's Hospital of Buffalo</u>
Norman Wang	Fall 2007-Spring 2009; Major in Cell Biology and Molecular Genetics; <u>Went on to</u> <u>University of Maryland School of Dentistry</u>
Andrew Kim	Fall 2007-Fall 2008: Major in Cell Biology and Molecular Genetics; Co-author on poster abstract; <u>Went on to University of Maryland Pharmacy School</u>
Gemstone Team	Summer 2007-Spring 2008; Co-mentor with Sam W. Joseph; Project titled "An Investigation of Staphylococcus aureus on the University of Maryland College Park Campus;" Team members included Anita Kohli, Bernadetta Puszkiewicz, Kevin Chai, Yeelan Ku, Angel Chang, Bixi Zeng, Chris Johnson, Daozhong Jin, Azeem Gopalani, Jessica Baxley, Zev Karkowsky, Maximillian Chen, and Stephanie Buszczak

Graduate Research Advising

Post-doctoral/Assistant Research Professors

Suhana Chattopadhyay	/ August 2022-Present; Post-doctoral Fellow
Rianna Murray	January 2019-Present; Assistant Research Professor
Leena Malayil	June 2019-Present; Assistant Research Professor; ASM Student Travel Award 2021 to attend World Microbe 2021
Sarah Allard	Fall 2016-Summer 2019; Post-doctoral Fellow; Produce Safety Alliance Trainer Certification (2017); CONSERVE International Scholarship, Israel (January 2017); Currently an Assistant Project Scientist, UCSD.
Eoghan Smyth	January 2015-Spring 2018; Post-doctoral Fellow; UMD/Battelle TCORS Pilot/Development Project Program Award 2015/2016, "Fungal Constituents and Their Role in Tobacco-specific Nitrosamine and Mycotoxin Formation in Smoked and Smokeless Tobacco Products"; UMD/Battelle TCORS Pilot/Development Project Program Award 2016/2017, "Exhaled Breath Microbiome of Smokers and Non-smokers."
Kristi S. Shaw	Summer 2014-Summer 2015; Post-doctoral Fellow
Sutyajeet Soneja	Fall 2014-Fall 2016; Post-doctoral Fellow; International Society for Environmental Epidemiology Travel Award (August 2015); International Society for Exposure Science Diversity Award (October 2015); <u>Currently an</u> <u>Epidemiologist & Lead Public Health Specialist at MITRE.</u>
Shirley A. Micallef	Fall 2008-Summer 2011; Post-doctoral Fellow; <u>Currently a tenured Associate</u> <u>Professor</u> , University of Maryland College Park, Department of Plant Sciences and Landscape Architecture & Center for Food Safety Security Systems
<u>PhD Students, Major A</u>	<u>dvisor</u>
Taiwo Alawode	Fall 2022-Present; PhD program in Environmental Health Sciences
Ibiyinka Amokeodo	Fall 2021-Present; PhD program in Environmental Health Sciences
Suhana Chattopadhyay	/ Fall 2020-Summer 2022; PhD program in Environmental Health Sciences; UMD Global STEWARDS Fellow 2021-2022 (NSF National Research Traineeship Program; Faculty-Student Research Award, University of Maryland Graduate School (2021-2022); Graduate Student Summer Research Fellowship, University of Maryland Graduate School (Summer 2021); Wait Family Endowed Environmental Graduate Scholarship, University of Maryland School of Public Health (Spring 2021); Jacob K. Goldhaber Travel Grant, University of Maryland Graduate School (Spring 2021); International Conference Student Support Award, Office of the President & University of Maryland Graduate School (Spring 2021); Dean's Fellowship, University of Maryland School of Public Health (2020-2022)

Michele MorgadoFall 2019-Present; PhD program in Environmental Health Sciences; 3rd place
honorary award for 2021 Public Health Research @ Maryland Poster
Presentation; Wait Family Endowed Scholarship Winner (March 2022)

Health (2020-2022)

Leena MalayilFall 2015-Summer 2019; PhD program in Toxicology and Environmental Health;American Society for Microbiology, Student Travel Award (May 2016); American

	Society for Microbiology, Student Travel Award (May 2017); Wait Family Scholarship Winner (September 2017); Raymond Sarber Award, American Society for Microbiology (January 2018); UMD School of Public Health, Dean's Fellowship (June 2018); Jacob K. Goldhaber Travel Grant (June 2018); UMD International Conference Student Support Award (June 2018); <u>Currently an</u> <u>Assistant Research Professor in my group</u>
Hillary Craddock	Fall 2015-Spring 2019 (Co-advisor with Dr. Paul Turner); PhD program in Toxicology and Environmental Health; Dean's Fellowship Awardee (Fall 2015- Spring 2017); University of Maryland Graduate Research Appreciation Day, Second Place Poster Winner (April 2016); Wait Family Environmental Graduate Scholarship Winner (June 2016); International Association for Food Protection, Student Travel Scholarship Winner (July 2017); International Graduate Research Fellowship Winner (August 2017); UMD School of Public Health, Dean's Fellowship (June 2018); Anne G. Wylie Dissertation Fellowship (2018); <u>Currently completing a Fulbright Post-doctoral Fellowship, Ben Gurion University 2019- Present</u>
Jessica Chopyk	Fall 2015-Spring 2019; PhD program in Toxicology and Environmental Health; University of Maryland Bioscience Day, First Place Poster Winner (October 2016); Awardee, University of Maryland's COMBINE (Computation and Mathematics for Biological Networks) Fellowship program, a National Science Foundation-funded Research Traineeship program (NSF: 1632976) (January 2017); Awardee, Jacob K. Goldhaber Travel Grant (February 2017); International Conference Student Support Award Winner, University of Maryland Graduate School (September 2017); International Student Support Award Winner, University of Maryland Graduate School (May 2018); UMD School of Public Health, Dean's Fellowship (June 2018); Jacob K. Goldhaber Travel Grant (June 2018); Rita Colwell Travel Fellowship (July 2018); <u>Currently a Toxicologist at</u> <u>CTEH.</u>
Rianna Murray	Spring 2014-Fall 2018; PhD program in Toxicology (Co-Advisor: Sacoby Wilson) Working on special projects in my lab; University of Maryland Graduate Research Appreciation Day, First Place Poster Winner (April 2016) Wait Family Environmental Graduate Scholarship Winner (June 2016); University of Maryland School of Public Health, Dean's Scholar Awardee (2016); International Association for Food Protection, Student Travel Scholarship Winner (July 2017); University of Maryland Graduate Research Appreciation Day, First Place Poster Winner (April 2017); Awardee, Lee Thornton Fellowship (Spring 2017); MIAEH Summer Research Fellowship (2017); Awardee, Jacob K. Goldhaber Travel Award (2017); UMD School of Public Health, Dean's Fellowship (June 2018); <u>Currently an Assistant Research Professor and Graduate Director of the</u> Maryland Institute for Applied Environmental Health
Prachi Kulkarni	Fall 2012-Fall 2016; PhD program in Toxicology and Environmental Health; Dean's Fellowship (Fall 2012-Spring 2013); CONSERVE International Scholarship, Israel (January 2017). Dissertation titled <i>"Antibiotic concentrations and the</i> <i>composition of bacterial communities in municipal wastewater and reclaimed</i> <i>water"</i> ; <u>Currently a Research Associate</u> , USDA Beltsville Agricultural Research Center
Rachel E. Rosenberg Goldstein	Fall 2010-Spring 2013; Began in PhD program in Epidemiology and transferred into PhD program in Toxicology and Environmental Health, Spring 2012; Dean's Fellowship (Fall 2010 – Spring 2013); University of Maryland Graduate Student

Summer Research Fellowship (Fall 2010 – Spring 2013); University of Maryland Graduate Research Interaction Day Health Presentation Award (2nd place) (April 2011); University of Maryland, College Park School of Public Health, Student Research Interaction Day Poster Award (September 2011); APHA Environment Section Student Scholarship (October 2011); University of Maryland Bioscience & Technology Review Day Water Quality and Management Poster Winner (November 2011); Maryland Institute for Applied Environmental Health Fellowship (November 2011 – Spring 2012); Student Scholarship, Priester National Extension Health Conference (April 2012); "Engaged Me" Award, Priester National Extension Health Conference (April 2012); University of Maryland Bioscience & Technology Review Day Family, Community and Public Health Poster Winner (November 2012); University of Maryland School of Public Health, Dean's Scholar Awardee (2013); Dissertation titled "Antibiotic-resistant bacteria in wastewater and potential human exposure through wastewater reuse"; Currently an Assistant Professor, University of Maryland School of Public Health

Erinna KinneyFall 2009-Spring 2010; PhD program in Marine Estuarine Environmental
Sciences; 2009 American Public Health Association (APHA), Environment Section
Student Scholarship Award; Currently is a Public Health Scientist-Lead at the
Maryland Department of Health and Mental Hygiene

PhD Students, Committee Member

Kyle Brumfield	Fall 2019-Present; PhD program in Cell Biology and Molecular Genetics (Primary Advisory: Rita Colwell)
Chanelle Acheamfour	Fall 2017-Fall 2021; PhD program in Food Science and Technology at the University of Maryland Eastern Shore (Primary Advisor: Fawzy Hashem)
Arlene Chen	Fall 2014-Fall 2019; PhD program in Cell Biology and Molecular Genetics (Primary Advisor: Anwar Huq)
Latisha Judd	Fall 2013-Fall 2018; PhD program in Animal Science (Primary Advisor: Richard Kohn)
Mary Larkin	Fall 2014-Fall 2016; PhD program in Toxicology, University of Maryland, School of Medicine (Primary Advisor: Kathy Squibb)
A.K. Leight	Fall 2010-Fall 2016; PhD program in Marine Estuarine Environmental Sciences; Dissertation titled <i>"Dynamics and drivers of fecal indicator bacteria and associated bacterial community members in estuarine waters"</i> (Primary Advisors: Byron Crump and Raleigh Hood, Horn Point)
Sarah Allard	Spring 2016-Fall 2016; PhD program in Plant Sciences and Landscape Architecture (Primary Advisor: Shirley Micallef); Dissertation titled <i>"Bacterial communities of the specialty crop phyllosphere: Response to agricultural soil amendment use, rainfall and insect visitation."</i>
Kimberly Mitchell	Fall 2013-Spring 2015; PhD program in Behavioral and Community Health; Dissertation titled "Assessing knowledge, attitudes and behaviors toward West Nile Virus prevention among adults >=60 years old in Maryland: An application of the health belief model" (Primary Advisor: Donna Howard)

Kristi ShawFall 2007-Spring 2013; PhD program in Marine Estuarine Environmental
Sciences; Dissertation titled "Ecological and human exposure assessment of
select bacterial and viral pathogens in estuarine and marine areas of importance
to public use" (Primary Advisor: Byron Crump, Horn Point)

Bradd J. HaleyDefended Spring 2012; PhD program in University of Maryland Institute for
Advanced Computer Studies; Dissertation titled *"Polyphasic analyses on the*
natural ecology of human pathogens" (Primary Advisor: Rita Colwell); Currently
a Research Microbiologist at the U.S. Department of Agriculture

Master of Public Health (MPH) Students, Major Advisor

- Rhodel Bradshaw Fall 2015-Spring 2017; MPH student in Environmental Health Sciences
- Kelsey BabikFall 2013-Spring 2015; MPH in Environmental Health Sciences: University of
Maryland School of Public Health, Dean's Scholar Awardee (2015); Capstone
Project titled *"Biosafety plan for select agents toxins"* Currently an Industrial
Hygienist fellow at CDC/NIOSH
- Molly ReidFall 2013-Summer 2015; MPH in Environmental Health Sciences: Thesis titled
"Impact of Cryptosporidium spp. interaction with co-occurring microorganisms
on moderate-to-severe diarrhea in the developing world"; Currently a Research
Assistant at the University of California San Francisco, Samsung Digital Health
and Innovation Lab
- Meleah Boyle Fall 2012-Summer 2014; MPH in Environmental Health Sciences; University of Maryland School of Public Health, Dean's Scholar Awardee (2014); Thesis titled *"Monitoring and assessment of residential exposure to noise associated with natural gas compressor stations in West Virginia"*; <u>Currently a doctoral student</u> at the University of Maryland School of Public Health
- Stephanie CareyFall 2012-Spring 2013; MPH in Environmental Health Sciences; University of
Maryland School of Public Health, Dean's Scholar Awardee (2013); Thesis titled
*"Assessing the presence of antibiotic-resistant Enterococcus in reclaimed water
used for spray irrigation"* Currently a Medical Resident.
- June de Graft-Hansen Fall 2011-Fall 2013
- Barbara Zappe Fall 2010-Fall 2013; MPH in Environmental Health Sciences; Thesis titled *"Impact of Rurality, Broiler Operations, and Community Socioeconomic Factors on the Risk of Campylobacteriosis in Maryland";* APHA Environment Section Student Poster Award (October 2012); Public Health Research @ Maryland, Outstanding Academic Poster Award (April 2013)
- Allison Tjaden Fall 2010-Spring 2012; MPH in Environmental Health Sciences; Capstone project titled "UMD Dining Services Sustainable Food Action Plan"; Currently working as an Assistant Director of New Initiatives with UMD Dining Services; Winner of 2015 "Fifty under 50 Food Heroes: Transforming DC's Food System"
- Rachel E. Rosenberg Fall 2008-Spring 2010; MPH in Environmental Health Sciences; Thesis titled *"Evaluation of antibiotic-resistant bacteria in tertiary treated wastewater, reclaimed wastewater used for spray irrigation, and resulting occupational exposures";* Jacob K. Goldhaber Travel Grant (August 2009); American Public Health Association Environment Section's Student Achievement Poster Award

	(November 2009); University of Maryland Bioscience & Technology Review Day Family, Community and Public Health Poster Award (November 2009); Dean's Graduate Scholar (March 2010); Maryland Water Resources Research Center 2010 Summer Fellowship (May-August, 2010); <u>Currently an Assistant Professor</u> <u>at the University of Maryland School of Public Health</u>
Erinna Kinney	Fall 2007-Spring 2009; MPH in Environmental Health Sciences; Thesis titled <i>"Isolation, identification and antimicrobial susceptibility analysis of Enterococcus spp. and Salmonella spp. from conventional poultry farms transitioning to organic farming practices":</i> <u>Currently a Public Health Scientist-Lead at the Maryland Department of Health and Mental Hygiene</u>
Master Students, Com	mittee Member or Minor Advisor on Special Research Project
Priti Patel	Summer 2014-Spring 2015; MPH in Environmental Health Sciences; <u>Currently a</u> <u>Research Analyst at IQ Solutions</u>
Christopher Caler	Fall 2012-Spring 2013; MPH in Environmental Health Sciences; Capstone Project titled <i>"Containment Testing of Compressed Gas Cylinders Within Chemical Fume Hoods – Are only Lecture Bottles Safe?"</i> <u>Currently a Laboratory Safety and Industrial Hygiene Specialist at the University of Maryland</u>
Jake Guag	Fall 2010-Fall 2012; MPH in Environmental Health Sciences; Thesis titled <i>"Residual DNA in Commercial Taq DNA Polymerase as a Source of Interference with Immuno-PCR Assay"</i> ; <u>Currently a Biologist at the U.S. Food and Drug Administration</u>
Greg Raspanti	Fall 2010-Spring 2012; MPH in Environmental Health Sciences; Thesis titled <i>"Environmental impacts on fecal indicator bacteria in five national park recreational water areas"</i> ; <u>Currently a Post-doctoral Fellow at the UMD School of Public Health</u>
Donna Pahl	Fall 2009-Fall 2010; Master of Plant Science program in Plant Sciences and Landscape Architecture (Primary Advisor: Chris Walsh); Thesis titled "Comparing source of agricultural contact water and the presence of fecal indicator organisms on the surface of "Juliet" grape tomatoes" <u>Currently a Southwest</u> <u>Regional Extension Associate at Cornell University.</u>
Cheryl Carmona	Fall 2008-Fall 2010; MS in Environmental Science and Technology (Primary Advisor: Joshua McGrath); Thesis titled " <i>Agri-environmental assessment of</i> <i>pelletized broiler litter in corn production: laboratory studies</i> " Founder of Boone Street Farm, an urban agriculture organization in Baltimore, MD; Gave a TED Talk in 2014: Baltimore's Urban Soil, <u>https://www.youtube.com/watch?v=spyEYaibOGw</u>
Zenas Chang	Fall 2007-Fall 2010; MS in Cell Biology and Molecular Genetics; Thesis titled "A study of unusual metabolic variants of Aeromonas caviae and Aeromonas hydrophila using a polyphasic taxonomic approach" <u>Currently an OB/GYN at the</u> <u>University of Connecticut Health Center</u>
Joanne Perodin	Fall 2007-Spring 2009; MPH in Environmental Health Sciences; Thesis titled "Cross sectional evaluation of potential volatile organic compound exposures around U.S. Schools"; Currently the owner of CinetikFit

Jennifer Cockrill	Summer 2008; MPH student at the UC Berkeley School of Public Health; Completed summer internship working on a project regarding the spread of antibiotic-resistant bacteria from agricultural poultry litter application to surface water sources; <u>Currently an Epidemiologist at the Armed Forces Health</u> <u>Surveilance Center in Washington, D.C.</u>
Shauna Sweet	Spring 2008; MS in Survey Design; Advisor on project titled "Self-prescribed use of antimicrobials for menstrual symptoms among Nigerian university students;" Co-author on one poster presentation at APHA and one published, peer- reviewed paper; <u>Currently a Quantitative Methodologist at Nyla Technology</u> Solutions

Extension Activities

2011-Present Development of Safe Drinking Water Clinics in Maryland Counties where well owners learn how to properly collect well samples for testing, interpret the test results and implement interventions if necessary. Co-investigators: Karen Aspinwall, Elisabeth Maring, Daphne Pee, Rachel Rosenberg Goldstein

Service

Service to Academic and Public Health Communities

Project Advisory Committee Member, Water Research Foundation
Technical Advisory Committee Member, Water Research Foundation
Contributed professional expertise to a video that was created to highlight the history and work of the Center for a Livable Future, Johns Hopkins Bloomberg School of Public Health
Co-Chair and Member, Geospatial Working Group, Centers for Disease Control and Prevention, FoodNet Program
Member, Advisory Committee, Johns Hopkins Center for Excellence in Community Environmental Health Practice
Member, Search committee for the Chair of Epidemiology and Biostatistics
Member, Search committee for Graduate Director, MIAEH
Member, Search committee for Director, MIAEH
Chair, Search committee for tenure-track Assistant Professor, MIAEH
Member, Search committee for three tenure-track positions at the assistant/associate level, MIAEH
Member, Search committee for Coordinator, MIAEH
Member, Search committee for Chair, MIAEH

Other MIAEH Service

2015-2017	Curriculum development, PhD in Environmental Health Sciences
2015-Present	Member, MIAEH Executive Committee
2013-Present	Member, Advancement, Promotion and Tenure (APT) committee
2008-Present	Chair, Departmental programs, curricula and courses (PCC) committee
2013-2014	Member, Communications/Website committee
2012-2014	Member, Awards Committee
2008-2013	Member, Committee on adjunct/affiliate faculties
2008-2013	Member, Graduate recruitment and admissions committee
2008-2013	Member, Faculty merits committee
2008-2011	Library liaison
2008-2011	Institutional Review Board (IRB) liaison
2008-2011	Chair, Awards committee
2007-Present	Curriculum development for MIAEH MPH and PhD programs
2007-Present	Competencies development for MIAEH MPH and PhD programs
School Service	
2021/22	Member, Review committee for the Dean of the SPH
2015	Participated in CEPH site visit
2014-Present	Member, School Programs, Curricula and Courses (PCC) Committee
2014-2015	Member, Committee on the development of Public Health Science
	Undergraduate Degree
2014	Member, Committee Conducting the Review of MIAEH Chair
2010-2013	Chair, School Programs, Curricula and Courses (PCC) Committee
2010-2011	Member, Executive Committee of the School Assembly
2009	Provided input to Council on Education in Public Health (CEPH) accreditation
	process
2009	Participated in CEPH site visit
2008-2010	Chair, School Interdisciplinary Committee
2008-2010	Member, School Programs, Curricula and Courses (PCC) Committee
2008-2010	Member, Learning Outcomes Assessment (LOA) Committee
2007	Member, Search committee for Exercise Physiologist, Dept. of Kinesiology
2007	Respondent, John Snow Symposium, The Blue Death, September 10, 2007
University Service	
2017-2018	Member, Vice President of Research's Inclusive Excellence in Research
	Committee
2014-2015	Member, College Park City University Partnership (CPCUP), Center for Young
	Children Expansion Workgroup
2013-2015	Member, University of Maryland Senate, Programs, Curriculum and Courses
	Committee
2012	Participated in "Hey Impossible, Fear the Turtle" video project targeted towards
	UMD alumni, and was highlighted as a "Health Hero" <u>http://www.umd.edu/ftt/</u>
2012	Member, Search committee for tenure-track ecotoxicologist, Department of
	Environmental Science and Technology
2007-2008	Member, Search committee for tenure-track environmental health scientist,
	Department of Environmental Science and Technology

Community, State, National

2021-present	Technical Advisor, Safe Guilford Woods Initiative
2021-2022	Campaign Volunteer, Eric Olson for Prince George's County Council
4/30/12	Provided oral testimony to the Prince George's County District Council
	concerning the social and environmental impacts of the proposed rezoning of
	the Cafritz property in Riverdale, MD

7/16/09	Provided written testimony to the Peachbottom Township, PA School Board regarding the location of a proposed large-scale swine facility
12/18/07	Provided oral testimony in Peachbottom Township, PA; Zoning
	Commission Hearing for the placement of a large-scale swine facility.
2004	Certified Voter Registrar, Baltimore City Board of Elections
2000-2001	Volunteer, Baltimore Environmentors Project
1998-1999	Volunteer, New Haven Boys and Girls Club, New Haven, CT