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:

Ay Sqokata Date: 5/14/18

Personal Information

University of Maryland School of Public Health Maryland Institute for Applied Environmental Health Professor Affiliate Faculty, Department of Epidemiology and Biostatistics 2234P SPH Building College Park, MD 20742-2611

Phone: 301-405-1772 Fax: 301-314-1012 ars@umd.edu

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

5/18-Present Professor

University of Maryland School of Public Health Maryland Institute for Applied Environmental Health Affiliate, Department of Epidemiology and Biostatistics College Park, MD

8/13-5/18 Associate Professor

University of Maryland School of Public Health Maryland Institute for Applied Environmental Health Affiliate, 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

6/08-Present Affiliate Faculty

University of Maryland

Maryland Pathogen Research Institute

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 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 5/15/18, my published, peer-reviewed papers have been cited a total of 2,054 times (Average of 50.3 citations per article; Range, 0-466). My overall **h-index is 19**. 2016 Impact Factors are listed below, number of citations are defined by Google Scholar.

Articles Published or In Press in Peer-reviewed Journals

- 1. 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 estuary-associated syndrome—six states, 1998-1999. *Morbidity and Mortality Weekly Report* 49, 372-373. **Impact Factor: NA. Cited: 4.**
 - <u>Contribution of Amy R. Sapkota</u>: Generated and provided surveillance data for the State of Maryland; and edited the manuscript.
- 2. **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. **Impact Factor: 4.068. Cited: 68.**Contribution of Amy R. Sapkota: 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. **Impact Factor: 9.78. Cited: 135.**
 - <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. Impact Factor: 3.55. Cited: 211. Contribution of Amy R. Sapkota: Performed norovirus detection methods on stool, vomitus, and environmental surface samples; and contributed to the methods section of the manuscript.
- 5. 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. **Impact Factor: 6.198. Cited: 25.**<u>Contribution of Amy R. Sapkota:</u> Performed laboratory analyses; and contributed to the methods and discussion section of the manuscript.
- 6. **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.

Impact Factor: 4.359. Cited: 22.

<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 multidrug-resistant *Enterococcus* spp. and *Streptococcus* spp. recovered from the indoor air of a concentrated swine feeding operation. *Letters in Applied Microbiology* 43, 534-540. **Impact Factor: 1.575**. **Cited: 43.**
 - <u>Contribution of Amy R. Sapkota:</u> Developed study idea; designed and performed all laboratory analyses; and wrote the entire manuscript.
- 8. 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. Impact Factor: 9.78. Cited: 172. Contribution of Amy R. Sapkota: 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. Impact Factor: 9.78. Cited: 160.

 Contribution of Amy R. Sapkota: Developed study idea; designed sampling strategy; performed all
 field sampling trips and laboratory analyses; and wrote the entire manuscript. Served as the
 corresponding author.
- 10. 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. Impact Factor: 1.191. Cited: 5.
 Contribution of Amy R. Sapkota: Performed literature review and preliminary analyses; co-wrote the entire manuscript. Served as the corresponding author.
- 11. 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. Impact Factor: 1.790. Cited: 9.
 Contribution of Amy R. Sapkota: Assisted with laboratory analyses; and wrote a significant portion of the manuscript.
- 12. 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. Impact Factor: 7.088. Cited: 395. Contribution of Amy R. Sapkota: Performed literature review; and wrote significant portions of the manuscript.
- 13. Ojo KK†, **Sapkota AR**, Pottinger PS, Ojo TB. 2008. Antimicrobial resistance gene distribution: A socioeconomic and sociocultural perspective. *German Medical Science* 3, 1-6. **Impact Factor: NA**. **Cited: 9.** Contribution of Amy R. Sapkota: Contributed to manuscript idea; and wrote significant portions of this manuscript.
- 14. **Sapkota AR**[†], Berger S, Vogel, TM. 2010. Human pathogens abundant in the bacterial metagenome of cigarettes. *Environmental Health Perspectives* 118, 351-6. **Impact Factor: 9.78**. **Cited: 60**. Contribution of Amy R. Sapkota: 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.
- 15. 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. **Impact Factor: 4.208**. **Cited: 12**. Contribution of Amy R. Sapkota: Performed laboratory analyses; and edited the manuscript.

- 16. 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. Impact Factor: 2.265. Cited: 62. Contribution of Amy R. Sapkota: 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.
- 17. 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. **Impact Factor: 9.78. Cited: 36.**

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

http://ehp03.niehs.nih.gov/article/fetchArticle.action?articleURI=info%3Adoi%2F10.1289%2Fehp.11 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.

- 18. 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. Impact Factor: 3.835. Cited: 50.
 - <u>Contribution of Amy R. Sapkota</u>: Conceived study idea; designed sampling strategy; supervised data collection and laboratory analysis; wrote major portions of the manuscript. Served as the corresponding author.
- 19. 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. Impact Factor: 3.759. Cited: 16. Contribution of Amy R. Sapkota: Provided the environmental *Salmonella* isolates; assisted in the study design; and contributed to the manuscript.
- 20. 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. Impact Factor: 9.78. Cited: 59.
 Secondary Write-up: This article was selected by the journal, Environmental Health Perspectives as one of their Science Selections: https://ehp.niehs.nih.gov/120-a437a/ Contribution of Amy R. Sapkota: 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.
- 21. 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. **Impact Factor: 4.138. Cited: 7.** <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.
- 22. 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. Impact Factor: 3.759. Cited: 26.
 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.

- 23. 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. Impact Factor: 4.9. Cited: 47.
 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.
- 24. 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. Impact Factor: 4.9. Cited: 15.
 Contribution of Amy R. Sapkota: Conceived study idea; designed study; supervised data collection and statistical analysis; and wrote the entire manuscript. Served as the corresponding author.
- 25. 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. **Impact Factor: 2.806. Cited: 39.**<u>Contribution of Amy R. Sapkota:</u> Directed the antimicrobial susceptibility testing; and wrote major portions of the manuscript. Served as the senior author.
- 26. 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. Impact Factor: 2.101. Cited: 11. 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.
- 27. 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. **Impact Factor: 3.575. Cited: 18.**Contribution of Amy R. Sapkota: Completed DNA extractions; facilitated 16S rRNA sequencing; assisted in data analysis; and wrote significant portions of the manuscript. Served as co-first author.
- 28. 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. **Impact Factor: 7.088. Cited: 7.**<u>Contribution of Amy R. Sapkota:</u> Assisted in the study design; revised and wrote major portions of

the manuscript.

- 29. 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. **Impact Factor: 7.088. Cited: 17.**<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.
- 30. 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. **Impact Factor: 3.835 Cited: 4.**<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.
- 31. 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. **Impact Factor: 3.835. Cited: 4.** Contribution of Amy R. Sapkota: Assisted in the study design; and contributed to major portions of the manuscript. Served as co-senior author.
- 32. 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. **Impact Factor: 3.835. Cited: 0.**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.
- 33. 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. **Impact Factor: 2.768 Cited: 2.**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.
- 34. 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. **Impact Factor: 8.496. Cited:0.**Contribution of Amy R. Sapkota: Conceived study idea; designed study; supervised experiments and

laboratory analyses; and revised the manuscript. Served as co-senior author.

- 35. 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. **Impact Factor: 4.076 Cited: 0.**<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.
- 36. Boyle M*, Sutyajeet S**, Quiros-Alcala L, Dalemarre L, **Sapkota AR**, Sangaramoorthy T, Wilson S, Miton D, Sapkota A. 2017. A pilot study to assess residential noise exposure near natural gas

- compressor stations. 2017. *PLoSOne*. 12(4): e0174310. **Impact Factor: 2.806 Cited: 0.**<u>Contribution of Amy R. Sapkota:</u> Assisted in study design and analysis; and revised the manuscript.
- 37. 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. **Impact Factor: 4.9. Cited: 0.**<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.
- 38. 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. **Impact Factor: 3.420. Cited: 0.**<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.
- 39. 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*. Jun 21;14(6). Impact Factor: 2.101. Cited: 0. 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.
- 40. 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. Impact Factor: 2.075. Cited: 0.
 Contribution of Amy R. Sapkota: Assisted in study design and analysis; and revised the manuscript.
- 41. 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. https://doi.org/10.3389/fmicb.2018.00792 [In Press]. Impact Factor: 4.076 Cited: 0. Conceived study idea; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.
- 42. 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 [In Press].
 Contribution of Amy R. Sapkota: Conceived study idea; supervised experiments and laboratory analyses; and revised the manuscript. Served as the corresponding author.

Articles Submitted to Peer-reviewed Journals

- 43. Leight AK*, Crump BC, **Sapkota AR**, Hood RR. Precipitation and seasonal water conditions impact bacterial community composition and densities of potential pathogen groups at a shellfish harvest area. [Submitted].

 <u>Contribution of Amy R. Sapkota:</u> Assisted in study design, analysis and interpretation; and revised the manuscript.
- 44. Chattopadhyay S, Smyth EM**, Hittle LE, Clark P, **Sapkota AR**, Mongodin EF. Little Cigars and Cigarillos Harbor Diverse Bacterial Communities that Differ Between the Tobacco and the Wrapper [Submitted].

45. Kulkarni P*, Raspanti GA**, Bui AQ, Bradshaw RN*, Sharma M, Sapkota A, **Sapkota AR**†. Zerovalent iron sand filtration can reduce the concentration of multiple antimicrobials in conventionally treated reclaimed water. [Submitted].

Articles In Preparation

- 46. Chopyk J*, Kulkarni P**, Nasko DJ**, Bradshaw R*, Kniel KE, Chiu P, Sharma M, **Sapkota AR.** Zerovalent iron sand filtration reduces viral community abundance and alters viral community composition in reclaimed water. [In Preparation].
- 47. Chattopadhyay S, Smyth EM**, Hittle LE, Clark P, **Sapkota AR**, Mongodin EF. The bacterial microbiota of little cigars and cigarillos differs between the tobacco and the wrapper. [In Preparation].
- 48. Reid MC, Cruz-Cano R, Pop M, **Sapkota AR**[†]. Lower odds of moderate-to-severe diarrhea among children co-infected with *Cryptosporidium* spp. and *Shigella* spp. or other pathogens compared to children with single infections. [In Preparation].
- 49. 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 in commercial cigarette products. [In Preparation].
- 50. Allard S, Treangen T, Handy E, East C, Solaiman S, Callahan MT, Chopyk J, Nasko D, Bui A, Kelbick HC, Mongodin E, Micallef S, Pop M, Sharma M, **Sapkota AR**. To Catch a Pathogen: Comparison of 16S rRNA gene sequencing, shotgun metagenomics, and culture-based methods for the detection of foodborne pathogens in non-traditional irrigation water in Maryland, United States. [In Preparation].
- 51. Allard S, Solaiman S, Callahan MT, Handy E, East C, Bui A, Kelbick HC, Mongodin E, Sharma M, Micallef S, **Sapkota AR**. 2018. Quenching by Sodium Thiosulfate does not influence 16S rRNA gene sequencing profiles of reclaimed water from three sites in Maryland, United States. [In Preparation].
- 52. Allard S, Callahan MT, Bui A, Ferelli A, Chopyk J, Micallef S, Sapkota AR. 2018. Creek to Table: Investigating the movement of fecal indicators, bacterial pathogens, and total bacterial communities through creek water irrigation of kale and radishes. [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

- 1. **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.
- 2. **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.

Invited National and International Presentations (Chapin is maiden name)

- 1. **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.
- 4. **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.
- 5. **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.
- 18. **Sapkota AR.** Water reuse, crop irrigation, and public health: Moving the science forward to achieve safe and sustainable water reuse in a changing climate. 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.

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 cost-effectiveness 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.
- 5. **Sapkota AR**, Joseph SW, Estrin A, Boyer M, McLaughlin C. Evaluating public health impacts and cost-effectiveness 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.

- 6. **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.
- 18. **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.

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.
- 2. **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.
- 4. **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.
- 5. **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.
- 6. **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.
- 8. **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.
- 9. **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.

- 10. 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.
- 13. 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.
- 17. 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.
- 18. 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.
- 28. 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.
- 39. 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.
- 40. 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.
- 51. 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.
- 57. 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. Allard S, Callahan MT, Bui A, Ferelli A, Chopyk J, Micallef S, **Sapkota AR**. 2018. 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.

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

- 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.
- 2. 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.
- 6. 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.
- 10. 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.
- 14. 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.
- 15. 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.
- 18. 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.
- 20. 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.
- 21. 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.
- 22. 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.
- 24. 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.

- 26. 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.
- 30. 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.
- 33. 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 tobaccousers. 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

Grants and Contracts

<u>Active</u>

3/16-3/20 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 for Food and Agriculture Role: **Center Project Director (Principal Investigator)**

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

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

Completed

9/14-9/17 Multiple projects supporting the Maryland Emerging Infections Program

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: PI; 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** Maryland Well **W**ater Program to **A**chieve **T**esting, **E**ducation and **R**esearch (WATER) 6/12-6/13 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: "Socioeconomic and environmental disparities in the risk of campylobacteriosis in the U.S.;" "Evaluating the influence of severe climate events on the incidence of

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, RO3 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 Français 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 Awards

- 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.

Reviewing Activities

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

Grant Proposal and Application Review (number reviewed)

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
- !!			- 0	
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		
, 0	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		
	WILLISOS	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		
	D3C1373G	CBWG Bept. Research	1 Student	3 creates		
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	Food-, Water-, Airborne Inf. Dis.	6 Students	3 credits		
	MIEH785	Internship in Public Health	3 Students	3 credits		
	MIEH789	Independent Study	1 Student	3 credits		
	MIEH309	Research in Environmental Health	2 Students	2 credits		
	BSCI379G	CBMG Dept. Research	1 Student	3 credits		
Spring 2015	MIEH 799	Master's Thesis Research	1 Student	6 credits		
	MIEH786	Capstone Project in Public Health	3 Students	3 credits		
	MIEH309	Research in Environmental Health	1 Student	2 credits		
Summer 2015	MIEH 799	Master's Thesis Research	1 Student	1 credit		
	MIEH 785	Internship in Public Health	1 Student	3 credits		
Fall 2015	MIEH773	Food-, Water-, Airborne Inf. Dis.	5 Students	3 credits		
	MIEH 609	Methods in Toxicology	1 Student	3 credits		
	MIEH309	Research in Environmental Health	2 Student	2 credits		
		5	26	.		
Spring 2016	MIEH 309	Research in Environmental Health	3 Students	2 credits		
	MIEH899	Doctoral Dissertation Research	1 Student	3 credits		
Fall 2016	MIEH 309	Research in Environmental Health	5 Students	3 credits		
1 811 2010		To develop newly funded Center	J Students	3 Credits		
	Course warver	To develop newly funded center				
Spring 2017	Sabbatical	To complete Fulbright Senior Research	her Scholarship i	n Nepal		
-60 =01,		The state of the s				
Fall 2017	MIEH773	Food-, Water-, Airborne Inf. Dis.	5 Students	3 credits		
	MIEH309	Research in Environmental Health	3 Students	2 credits		
Course or Curri	Course or Curriculum Development					

Course or Curriculum Development

Played major roles in curriculum development for MPH and two PhD programs in Overall **Environmental Health Sciences**

Biological Contaminants in the Environment (Now entitled Food-, Water-, and Airborne **MIEH 773** Infectious Diseases)

Role: Developed the entire course from scratch.

MIEH 720 Principles of Toxicology

Role: Developed the entire course from scratch.

MIEH698A/ Seminar: Current Topics in Environmental and Occupational Health

MIEH688 Role: Developed seminar course from scratch.

MIEH785 Internship in Public Health

Role: Heavily revamped internship program and handbook for MPH in Env. Hlth.

MIEH786 Capstone Project in Public Health

Roles: Heavily revamped capstone project program and handbook for MPH in Env. Hlth.

Guest Lectures

MIEH 600 Principles of Environmental Health (One to two guest lectures each semester)

MIEH 771 Exposure Assessment of Environmental Hazards (One guest lecture each semester)

FMSC280 Global, Child & Family Health: Getting There Via E-Communications (One guest lecture

each Fall semester)

HONR268C Honors Seminar: Public Health Perspectives: How Does the Environment affect Human

Health? (One guest lecture each semester)

Exchange International Exchange Program with Kyung Hee University (Korea) entitled "Engineering"

Program Technology and Public Health" (Summer Undergraduate Program) (Two guest lectures in

food and waterborne disease and hands-on field and laboratory based practicums)

Mentoring and Advising

Undergraduate Research Advising

River Williams Fall 2016-Present; Major in Public Health Science

Mansi Panse Fall 2016-Present; Major in Neurobiology and Physiology

Robin Cagle Spring 2016-Present; Major in Environmental Health

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; Currently has a full scholarship to complete a

PhD in Microbiology at Cornell University

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; Currently in medical school Summer 2015, UM STARS Summer Program; Undergraduate student from UC Jackie Taylor Berkeley **Rhodel Bradshaw** Summer 2014 & 2015, UM STARS Summer Program; Undergraduate student at the University of the Virgin Islands; Currently an MPH student at the UMD SPH. Spring 2014; Major in Cell Biology and Molecular Genetics. Seong Park Arshom Foroutan Fall 2013-Spring 2014; Major in Neurophysiology; Currently in Medical School. **Taylor Carter** Fall 2012-Spring 2013; Major in Cell Biology and Molecular Genetics; Currently working as a lab technician at the Institute of Marine and Environmental Technology. Angeo Belen Fall 2012-Summer 2014; Major in Cell Biology and Molecular Genetics; Currently in Pharmacy School Spring 2012-Summer 2012; B.S. Cornell University; Post-Bac University of Deborah Jack Maryland; Went on to complete Medical School 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; Coauthor on one published, peer-reviewed paper and one paper in revision; First author on manuscript to be submitted in Summer 2012; Currently a doctoral student in Microbiology at Albert Einstein School of Medicine, Fall 2012-Present. Emma Claye Spring 2011; Major in Cell Biology and Molecular Genetics; Went on to complete a MPH degree at Yale University School of Public Health; Currently working as an epidemiologist with the New York City Health Department Nicole Schreiber Fall 2010-Spring 2011; Major in Cell Biology and Molecular Genetics and Journalism; Currently working as a Clinical Research Supervisor at Memorial Sloan Kettering Cancer Center **Ariel Stoler** Spring 2010-Fall 2010; Major in Cell Biology and Molecular Genetics Rachel Tran Fall 2009; Major in Cell Biology and Molecular Genetics; Went on to Physician Assistant school Zanetta Chang Fall 2009; Major in Cell Biology and Molecular Genetics; Went on to complete a PhD in Microbiology 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; Went on to complete Osteopathic Medical School; Currently a resident in Pediatrics at Women and Children's Hospital of Buffalo

Norman Wang Fall 2007-Spring 2009; Major in Cell Biology and Molecular Genetics; Went on to

University of Maryland School of Dentistry

Andrew Kim Fall 2007-Fall 2008: Major in Cell Biology and Molecular Genetics; Co-author

on poster abstract; Went on to University of Maryland Pharmacy School

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

<u>Post-doctoral</u>

Sarah Allard Fall 2016-Present; Produce Safety Alliance Trainer Certification (2017);

CONSERVE International Scholarship, Israel (January 2017).

Eoghan Smyth January 2015-Present; 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

Sutyajeet Soneja Fall 2014-Fall 2016; International Society for Environmental Epidemiology Travel

Award (August 2015); International Society for Exposure Science Diversity

Award (October 2015); Currently an AAAS Fellow at USAID

Shirley A. Micallef Fall 2008-Summer 2011; <u>Currently a tenured Associate Professor</u>, University of

Maryland College Park, Department of Plant Sciences and Landscape

Architecture & Center for Food Safety Security Systems

PhD Students, Major Advisor (NOTE: MIAEH did not have a PhD program until Spring 2012)

Hillary Kelbick Fall 2015-Present (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); Anne G. Wylie Dissertation Fellowship (2018)

Jessica Chopyk Fall 2015-Present; 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 (September 2017)

Leena Mayalil Fall 2015-Present; 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 2018

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 "Antibiotic concentrations and the composition of bacterial communities in municipal wastewater and reclaimed water"; Currently a Research Associate, 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 a Research Assistant Professor, University of Maryland Extension

Erinna Kinney

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

PhD Students, Committee Member

Latisha Judd Fall 2013-Present; PhD program in Animal Science (Primary Advisor: Richard

Kohn)

Arlene Chen Fall 2014-Present; PhD program in Cell Biology and Molecular Genetics (Primary

Advisor: Anwar Huq)

Mary Larkin Fall 2014-Fall 2016; PhD program in Toxicology, University of Maryland, School

of Medicine (Primary Advisor: Kathy Squibb)

Rianna Murray Spring 2014-Present; PhD program in Toxicology; 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) (Primary Advisor: Sacoby

Wilson)

Fall 2010-Fall 2016; PhD program in Marine Estuarine Environmental Sciences; A.K. Leight

> Dissertation titled "Dynamics and drivers of fecal indicator bacteria and associated bacterial community members in estuarine waters" (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 "Bacterial communities of the specialty crop phyllosphere: Response to agricultural soil

amendment use, rainfall and insect visitation."

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); Currently an Epidemiologist at the Maryland Department of Health and Mental Hygiene

Kristi Shaw Fall 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)

Defended Spring 2012; PhD program in University of Maryland Institute for Bradd J. Haley

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 Babik Fall 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 Reid Fall 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

Fall 2012-Summer 2014; MPH in Environmental Health Sciences; University of Meleah Boyle

> 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"; Currently a doctoral student

at the University of Maryland School of Public Health

Stephanie Carey Fall 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 in Medical School

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); Currently a Research Assistant

Professor at the University of Maryland

Erinna Kinney Fall 2007-Spring 2009; MPH in Environmental Health Sciences; Thesis titled

"Isolation, identification and antimicrobial susceptibility analysis of Enterococcus spp. and Salmonella spp. from conventional poultry farms transitioning to organic farming practices": Currently a Public Health Scientist-Lead at the

Maryland Department of Health and Mental Hygiene

Master Students, Committee Member or Minor Advisor on Special Research Project

Priti Patel Summer 2014-Spring 2015; MPH in Environmental Health Sciences; Currently a

Research Analyst at IQ Solutions

Christopher Caler Fall 2012-Spring 2013; MPH in Environmental Health Sciences; Capstone Project

titled "Containment Testing of Compressed Gas Cylinders Within Chemical Fume

Hoods – Are only Lecture Bottles Safe?" Currently a Laboratory Safety and

Industrial Hygiene Specialist at the University of Maryland

Jake Guag Fall 2010-Fall 2012; MPH in Environmental Health Sciences; Thesis titled

"Residual DNA in Commercial Taq DNA Polymerase as a Source of Interference with Immuno-PCR Assay"; Currently a Biologist at the U.S. Food and Drug

<u>Administration</u>

Greg Raspanti Fall 2010-Spring 2012; MPH in Environmental Health Sciences; Thesis titled

"Environmental impacts on fecal indicator bacteria in five national park recreational water areas"; Currently a Post-doctoral Fellow at the UMD School

of Public Health

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" Currently a Southwest

Regional Extension Associate at Cornell University.

Cheryl Carmona Fall 2008-Fall 2010; MS in Environmental Science and Technology (Primary

Advisor: Joshua McGrath); Thesis titled "Agri-environmental assessment of pelletized broiler litter in corn production: laboratory studies" Founder of Boone Street Farm, an urban agriculture organization in Baltimore, MD; Gave a TED

Talk in 2014: Baltimore's Urban Soil,

https://www.youtube.com/watch?v=spyEYaibOGw

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</u>

Resident at the University of Connecticut Health Center

Joanne Perodin Fall 2007-Spring2009; 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; Currently and Epidemiologist at the Armed Forces Health

Surveilance Center in Washington, D.C.

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

2013 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

2011-2014 Co-Chair and Member, Geospatial Working Group, Centers for Disease Control

and Prevention, FoodNet Program

2003-2005 Member, Advisory Committee, Johns Hopkins Center for Excellence in

Community Environmental Health Practice

Departmental Service

Search Committees	
2015	Member, Search committee for Director, MIAEH
2013	Chair, Search committee for tenure-track Assistant Professor, MIAEH
2010	Member, Search committee for three tenure-track positions at the
	assistant/associate level, MIAEH
2010	Member, Search committee for Coordinator, MIAEH
2008	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
2008-2013	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
Cabaal Camilaa	
School Service	Dark to the orbit to the
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" http://www.umd.edu/ftt/
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

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