

## **CURRICULUM VITAE**

Amir Sapkota, Ph.D.

### **Education**

- 2005      **Johns Hopkins University Bloomberg School of Public Health**, Baltimore, MD  
Doctor of Philosophy in Environmental Health Sciences, 1999-2005  
Certificate in Risk Sciences and Public Policy, 2001  
Advisor: Timothy J. Buckley, PhD, CIH
- 1998      **Clark University**, Worcester, MA  
Bachelor of Science in Chemistry
- 1998      **Clark University**, Worcester, MA  
Bachelor of Science in Environmental Sciences

### **Post-doctoral Training**

- 2005-2007   **International Agency for Research on Cancer (IARC)**,  
Gene Environment Epidemiology Group, Lyon, France  
Advisor: Paolo Boffetta, MD, MPH
- 2005      **Johns Hopkins University Bloomberg School of Public Health**, Baltimore, MD  
Department of Environmental Health Sciences  
Advisor: Rolf U. Halden, PhD

### **Employment**

- 08/14-Present      Associate Professor  
University of Maryland School of Public Health  
Maryland Institute for Applied Environmental Health  
College Park, MD
- 05/07-08/14      Assistant Professor  
University of Maryland School of Public Health  
Maryland Institute for Applied Environmental Health  
College Park, MD
- 1/10-Present      Affiliate Faculty  
University of Maryland  
Maryland Population Research Center  
College Park, MD

1/09-Present	Affiliate Faculty University of Maryland Marine Estuarine Environmental Sciences Graduate Program College Park, MD
10/05-05/07	Post-doctoral Fellow International Agency for Research on Cancer (IARC) Gene Environment Epidemiology Group, Lyon, France
09/04-09/05	Post-doctoral Fellow Johns Hopkins University Bloomberg School of Public Health Department of Environmental Health Sciences, Baltimore, MD
08/99-09/04	Research Assistant Johns Hopkins University Bloomberg School of Public Health Department of Environmental Health Sciences, Baltimore, MD
04/04-05/04	Research Assistant Nepal Nutritional Intervention Project Sarlahi (NNIPS), Kathmandu, Nepal
05/00-08/00	Fellow Tobacco Free Initiative World Health Organization, Geneva, Switzerland
03/98-08/99	Chemist Harvard School of Public Health, Boston, MA. Environmental Health Sciences
01/94-08/98	Research Assistant Clark University, Worcester, MA Department of Chemistry

**Publications** (†denotes corresponding author; #denotes advised undergraduate students; \*denotes advised graduate students).

**Publication Statistics:** According to [www.researcherid.com](http://www.researcherid.com), my published, peer-reviewed papers have been cited a total of 3572 times with an average of 99.22 citations per paper. **My overall h-index is 17.**

<http://www.researcherid.com/rid/A-5968-2011>

#### Articles Published or In Press in Peer-reviewed Journals

1. Fisher JA, Jiang C, Soneja SI, Mitchell C, Puett RC, **Sapkota A<sup>†</sup>**. Summertime extreme heat events and increased risk of acute myocardial infarction hospitalizations. *J Expo Sci Environ Epidemiol*. 27(3):276-280. doi: 10.1038/jes.2016.83 (2017)
2. Hsieh S, Sapkota A, Wood R, Bearer C, Kapoor S. Neonatal ethanol exposure from ethanol-based hand sanitisers in isolettes. *Arch Dis Child Fetal Neonatal Ed*. 2017 Jun 6. pii: fetalneonatal-2016-311959. doi: 10.1136/archdischild-2016-311959 (2017).
3. Kulkarni P, Olson ND, Raspanti GA, Rosenberg Goldstein RE, Gibbs SG, Sapkota A, Sapkota AR. Antibiotic Concentrations Decrease during Wastewater Treatment but Persist at Low Levels in Reclaimed Water. *Int J Environ Res Public Health*. 2017 Jun 21;14(6). pii: E668. doi: 10.3390/ijerph14060668.
4. Boyle MD, Soneja SI, Quirós-Alcalá L, Dalemarre L, Sapkota AR, Sangaramoorthy T, Wilson S, Milton D, **Sapkota A<sup>†</sup>**. A Pilot Study to Assess Residential Noise Exposure Near Natural Gas Compressor Stations. *PLoS One*. 12(4):e0174310. doi: 10.1371/journal.pone.0174310. eCollection (2017)
5. Liu A, Soneja SI, Jiang C, Huang C, Kerns T, Beck K, Mitchell C, Sapkota A<sup>†</sup>. Frequency of extreme weather events and increased risk of motor vehicle collision in Maryland. *Sci Total Environ*. 580:550-555. doi: 10.1016/j.scitotenv.2016.11.211 (2017).
6. Lanikova L, Reading NS, Hu H, Tashi T, Burjanivova T, Shestakova A, Siwakoti B, Thakur BK, Pun CB, Sapkota A, Abdelaziz S, Feng BJ, Huff CD, Hashibe M, Prchal JT. Evolutionary selected Tibetan variants of HIF pathway and risk of lung cancer. *Oncotarget*. 14;8(7):11739-11747. doi: 10.18632/oncotarget.14340 (2017).
7. Romeo-Upperman C, Parker JD, Akinbami LJ, Jiang C, He X, Murtugudde R, Curriero F, Ziska L, **Sapkota A<sup>†</sup>**. Exposure to Extreme Heat Events Is Associated with Increased Hay Fever Prevalence among Nationally Representative Sample of US Adults: 1997-2013. *Journal of Allergy and Clinical Immunology: In Practice*. 5(2):435-441. DOI: <http://dx.doi.org/10.1016/j.jaip.2016.09.016>, (2017).
8. Soneja S, Jiang C, Fisher J, Upperman CR, Mitchell C, **Sapkota A<sup>†</sup>**. Exposure to extreme heat and precipitation events associated with increased risk of hospitalization for asthma in Maryland, U.S.A. *Environmental Health* 2016;15:57 DOI: 10.1186/s12940-016-0142-z
9. Soneja S, Jiang C, Upperman CR, Murtugudde R, Mitchell C, Blythe D, Sapkota AR, **Sapkota A<sup>†</sup>**. Extreme Precipitation Events and Increased Risk of Campylobacteriosis in Maryland, U.S.A. *Environmental Research*. 149:216-221 (2016)
10. LaKind JS, Overpeck J, Breyse PN, Backer L, Richardson SD, Sobus J, **Sapkota A**, Upperman CR, Jiang C, Beard CB, Brunkard JM, Bell JE, Harris R, Chretien JP, Peltier RE, Chew GL, Blount BC. Exposure science in an age of rapidly changing climate: challenges and opportunities. *Journal of Exp Sci Environ Epidemiol*. 26(6):529-538 (2016).
11. Boyle MD, Payne-Sturges DC, Sangaramoorthy T, Wilson S, Nachman KE, Babik K, Jenkins CC, Trowell J, Milton DK, Sapkota A<sup>†</sup>. Hazard Ranking Methodology for Assessing Health Impacts of Unconventional Natural Gas Development and Production: The Maryland Case Study. *PLoS One*. 2016 Jan 4;11(1):e0145368. doi: 10.1371/journal.pone.0145368 (2016).
12. Sangaramoorthy T, Jamison AM, Boyle MD, Payne-Sturges DC, Sapkota A, Milton DK, Wilson SM. Place-based perceptions of the impacts of fracking along the Marcellus Shale. *Soc Sci Med*. 151:27-37 (2016).

13. Greg A. Raspanti, Mia Hashibe, Bhola Siwakoti, Mei Wei, Binay Kumar Thakur, Chin Bahadur Pun, Mohammed Al-Temimi, Yuan-Chin Amy Lee, **Amir Sapkota**<sup>†</sup>. Household air pollution and lung cancer risk among never-smokers in Nepal. *Environ Res.* 146:141-145 (2016).
14. Montresor-Lopez JA, Yanosky JD, Mittleman MA, Sapkota A, He X, Hibbert JD, Wirth MD, Puett RC. Short-term exposure to ambient ozone and stroke hospital admission: A case-crossover analysis. *Journal of Exposure Science and Environmental Epidemiology.* 26(2):162-166 (2016).
15. Jiang C, Shaw KS, Upperman CR, Blythe D, Mitchell C, Murtugudde R, Sapkota AR, **Sapkota A**<sup>†</sup>. Climate change, extreme events and increased risk of salmonellosis in Maryland, USA: Evidence for coastal vulnerability. *Environ Int.* 18(83):58-62 (2015).
16. Romeo Upperman C, Parker J, Jiang C, He X, Murtugudde R, **Sapkota A**<sup>†</sup>. Frequency of Extreme Heat Event as a Surrogate Exposure Metric for Examining the Human Health Effects of Climate Change. *PLoS One.* 10(12):e0144202. doi: 10.1371/journal.pone.0144202 (2015).
17. Quirós-Alcalá L, Wilson S, Witherspoon N, Murray R, Perodin J, Trousdale K, Raspanti G, **Sapkota A**<sup>†</sup>. Volatile organic compounds and particulate matter in child care facilities in the District of Columbia: Results from a pilot study. *Environ Res.* 146:116-124 (2015).
18. Raspanti GA, Hashibe M, Siwakoti B, Wei M, Thakur BK, Pun CB, Milrod C, Adhikari S, Lee YC, **Sapkota A**<sup>†</sup>. Ethnic Variation in Consumption of Traditional Tobacco Products and Lung Cancer Risk in Nepal. *Asian Pac J Cancer Prev.* 16(14): 5721-5726 (2015).
19. Bruce N, Dherani M, Liu R, Hosgood HD 3rd, **Sapkota A**, Smith KR, Straif K, Lan Q, Pope D. Does household use of biomass fuel cause lung cancer? A systematic review and evaluation of the evidence for the GBD 2010 study. *Thorax:* 70(5):433-41 (2015).
20. Smith TJ, Wolfson JA, Jiao D, Crupain MJ, Rangan U, **Sapkota A**, Bleich SN, Nachman KE. Caramel color in soft drinks and exposure to 4-methylimidazole: a quantitative risk assessment. *PLoS One:*10(2):e0118138(2015).
21. Bashore CJ, Geer LA, He X, Puett R, Parsons PJ, Palmer CD, Steuerwald AJ, Abulafia O, Dalloul M, **Sapkota A**<sup>†</sup>. Maternal mercury exposure, season of conception and adverse birth outcomes in an urban immigrant community in Brooklyn, New York, U.S.A. *Int J Environ Res Public Health:* 11(8):8414-42 (2014).
22. Kerridge BT, Khan MR, Rehm J, **Sapkota A**. Terrorism, civil war and related violence and substance use disorder morbidity and mortality: a global analysis. *J Epidemiol Glob Health.* 4(1):61-72 (2014).
23. Rosenberg Goldstein RE, Micallef SA, Gibbs SG, He X, George A, **Sapkota A**, Joseph SW, Sapkota AR. Occupational exposure to *Staphylococcus aureus* and *Enterococcus* spp. among spray irrigation workers using reclaimed water. *Int J Environ Res Public Health:*11(4):4340-55 (2014).
24. Rosenberg Goldstein R, Micallef SA, Gibbs SG, George A, Claye E, **Sapkota A**, Joseph SW, Sapkota AR. 2013. Detection of Vancomycin-Resistant Enterococci (VRE) at Four U.S. Wastewater Treatment Plants that Provide Effluent for Reuse. *Science of the Total Environment* 466-467C:404-411. (2014)
25. Murray CJ, Abraham J,...**Sapkota A** et al. The State of US Health, 1990-2010: Burden of Diseases, Injuries, and Risk Factors. *JAMA* 310(6): 591-608 (2013).
26. Kerridge BT\*, Khan MR, Rehm J, **Sapkota A**. 2013 Conflict and Diarrheal and Related Diseases: A Global Analysis. *Journal of Epidemiology and Global Health:* 3(4):269-77. (2013)
27. Martin WJ, Glass RI, Araj H, Balbus L, Collins FS, Curtis S, Diette GB, Elwood WN, Falk H, Hibberd PL, Keown S, Mehta S, Patrick E, Rosenbaum J, **Sapkota A**, Tolunay E, Bruce N. Household Air Pollution

in Low- and Middle-Income Countries: Health Risks and Research Priorities. *PLoS Med*:10(6):e1001455. doi: 10.1371/journal.pmed.1001455..

28. Fransen M\*, Perodin J\*, Hada J, He X, **Sapkota A**†. Impact of vehicular strike on particulate matter air quality: Results from a natural intervention study in Kathmandu valley. *Environmental Research*, 122:52-7, (2013)..
29. **Sapkota A** †, Zaridze D, Szeszenia-Dabrowska N, Mates D, Fabiánová E, Rudnai P, Janout V, Holcatova I, Brennan P, Boffetta P, Hashibe M. Indoor Air Pollution from Solid Fuels and Risk of Upper Aerodigestive Tract Cancers in Central and Eastern Europe. *Environmental Research* 120: 90-95, (2013).
30. Lim SS, Vos T, ... **Sapkota A** et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 380(9859):2224-2260, (2012).
31. **Sapkota A**†, Chelikowsky AP\*, Nachman KE, Cohen AJ, Ritz B. Exposure to Particulate Matter and Adverse Birth Outcomes: A Comprehensive Review and Meta Analysis. *Air Quality, Atmosphere and Health*. 5(4): 369-381, (2012).
32. Reid BC, Ghazarian AA, Demarini DM, **Sapkota A**, Jack D, Lan Q, Winn DM, Birnbaum LS. Research Opportunities for Cancer Associated with Indoor Air Pollution from Solid-Fuel Combustion. *Environ Health Perspect*. 120(11): 1495-1498 (2012).
33. Rosenberg-Goldstein RE, Micallef SA., George A., Gibbs SG., **Sapkota A.**, Joseph SW. and Sapkota AR. Methicillin-resistant *Staphylococcus aureus* (MRSA) detected at four U.S. wastewater treatment plants. *Environ Health Perspect*. 120(11):1551-1558, (2012).
34. Kerridge BT\*, Khan MR, and **Sapkota A**. Terrorism, civil war, one-sided violence and global burden of disease. *Medicine, Conflict and Survival*. 28(3):199-218, (2012).
35. Parker JD, Kravets N, Nachman K, **Sapkota A**. Linkage of the 1999-2008 National Health and Nutrition Examination Surveys to traffic indicators from the National Highway Planning Network. *Natl Health Stat Report*. 45:1-16, (2012).
36. Biswas S\*, McGrath JM, **Sapkota A**†. Quantification of ionophores in aged poultry litter using liquid chromatography tandem mass spectrometry. *J Environ Sci Health B*. 47(10):959-66 (2012).
37. Hashibe M, Siwakoti B, Wei M, Thakur BK, Pun CB, Shrestha BM, Burningham Z, Lee YC, **Sapkota A**. Socioeconomic status and lung cancer risk in Nepal, *Asian Pac J Cancer Prev*. 12(4):1083-8, (2011)..
38. Hosgood D, Wei H, **Sapkota A**, Choudhury I, Bruce N, Rothman N, Lan Q. A meta-analysis of lung cancer attributed to in-home coal use with an emphasis on geographic variation. *International Journal of Epidemiology* 40(3):719-28 (2011)..
39. Heck JE, **Sapkota A**, Vendhan G, Jetly DH, oychowdhury S, Dikshit RP, Brennan P, Hashibe M, and Boffetta P. Diet and Hypopharyngeal Cancer: Results from a Multicenter Study in India. *Cancer Causes and Control*, 19(10): 1329-1337 (2008).
40. **Sapkota A**†, Sapkota AR, Kucharski M, Burke J#, McKenzie S, Walker P, Lawrence R. Aquaculture and human health: Current knowledge and future priorities. *Environment International*, 34(8): 1215-1226 (2008)..
41. Young T, Heidler J, Matos C, **Sapkota A**, Toler T, Gibson K, Schwab K, Halden R. Ab Initio and In Situ Comparison of Organic Wastewater Compounds as Indicators of Sewage-derived Microbes in Surface Waters. *Environmental Science and Technology*, 42(9): 3335-3340 (2008)..

42. **Sapkota A**, Hsu CC, Zaridze D, Shangina O, Szeszenia-Dabrowska N, Mates D, Fabiánová E, Rudnai P, Janout V, Holcatova I, Brennan P, Boffetta P, Hashibe M. Dietary Risk Factors for Squamous Cell Carcinoma of the Upper Aerodigestive Tract in Central and Eastern Europe. *Cancer Causes and Control*, 19(10): 1161-1170 (2008)..
43. **Sapkota A**, Gajalakshmi V, Jetly DH, Roychowdhury S, Dikshit RP, Brennan P, Hashibe M, Boffetta P. Indoor air pollution from solid fuel usage and risk of hypopharyngeal laryngeal and lung Cancer: A multicentric case-control study from India. *International Journal of Epidemiology*, 37(2):321-328 (2008)..
44. **Sapkota A**, Gajalakshmi V, Jetly DH, Roychowdhury S, Dikshit RP, Brennan P, Hashibe M, Boffetta P. Smokeless Tobacco and Increased Risk of Hypopharyngeal and Laryngeal Cancers: A Multicentric Case-Control Study from India. *International Journal of Cancer*, 121(8):1793-8 (2007).
45. McClean MD, Rinehart RD, **Sapkota A**, Cavallari JM, Herrick RF. Dermal Exposure and Urinary 1-Hydroxypyrene among Asphalt Roofing Workers. *J Occup Environ Hyg*, 4 Suppl 1:118-26 (2007).
46. **Sapkota A**, Heidler J, and Halden R. Detection of triclocarban and two co-contaminating chlorocarbanilides in US aquatic environments using isotope dilution liquid chromatography tandem mass spectrometry. *Environmental Research*, 103: 21-29 (2007).
47. Heidler J, **Sapkota A**, and Halden RU. Persistence, partitioning and accumulation of the topical antiseptic triclocarban in digested municipal sludge during conventional full-scale wastewater treatment. *Environmental Science & Technology* 40(11) 3634-3639. (2006)..
48. **Sapkota A**<sup>†</sup>, Halden R, Groopman JD, Dominici F, and Buckley TJ. Urinary biomarkers of 1,3-butadiene in environmental settings using liquid chromatography isotope dilution tandem mass spectrometry. *Chemico-Biological Interactions*, 160: 70-79 (2006).
49. **Sapkota A**, Symons JM, Kleissl J, Wang L, Parlange MB, Ondov J, Breysse PN, Diette GB, Eggleston PA, and Buckley TJ. The impact of 2002 Canadian forest fires on the air quality in Baltimore City. *Environmental Science & Technology* 39: 24-32 (2005).
50. **Sapkota A**, Williams D, and Buckley TJ. Tollbooth workers and mobile source-related hazardous air pollutants: how protective is the indoor environment? *Environmental Science & Technology*, 39: 2936-2943 (2005).
51. **Sapkota A**, and Buckley TJ. The mobile source effect on curbside 1,3-butadiene, benzene, and particle-bound polycyclic aromatic hydrocarbons assessed at a tollbooth. *Journal of Air and Waste Management Association* 53:740-748 (2003).

#### Book Chapters/ Monographs

1. Ducey SB, **Sapkota A**. Presence of Pharmaceuticals and Personal Care Products in the Environment – A Concern for Human Health? in *Contaminants of Emerging Concern in the Environment: Ecological and Human Health Considerations*; Chapter 17, pp 345–365 (2010). Chapter DOI: 10.1021/bk-2010-1048.ch017 ACS Symposium Series, Vol. 1048 American Chemical Society: Washington, DC.  
Contribution of Amir Sapkota: Co-wrote the chapter. Served as the senior author.
2. Mitchell C, Brown S, Fox M, Hayes J, Helzlsouer K, Matuszak K, Miller J, Smith CR, **Sapkota A**, Squibb K, Stern K. Environmental/Occupational Issues and Cancer. In *Maryland Comprehensive Cancer*

Control Plan. Chapter 8, pp 1-14 (2011). Maryland Department of Health and Mental Hygiene, Baltimore, MD.

Contribution of Amir Sapkota: Member of the expert committee. Wrote sections of the chapter.

3. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. 2010. Vol 95: Household use of solid fuels and high-temperature frying. IARC Monogr Eval Carcinog Risks Hum. 95:1-430 (2010).

Contribution of Amir Sapkota: Contributed as a IARC Secretariat

4. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. Vol 93: Carbon black, titanium dioxide, and talc. IARC Monogr Eval Carcinog Risks Hum. 93:1-413 (2010).

Contribution of Amir Sapkota: Contributed as a IARC Secretariat

5. IARC Handbooks of Cancer Prevention, Volume 11. Tobacco Control: Reversal of Risk after Quitting Smoking. 1-366 (2007).

Contribution of Amir Sapkota: Contributed as a IARC Secretariat

#### **Invited Presentations:**

1. **Sapkota A.** Use of LC/MS-MS to Determine the Major Mercapturic Acids of 1,3-butadiene Resulting from Low Level Environmental Exposure. Current Bioanalytical Applications in Mass Spectrometry, The National Institutes of Health, Bethesda, April 2004.
2. **Sapkota A.** Traffic Related Exposure to 1,3-Butadiene. Occupational and Environmental Epidemiology Branch, National Cancer Institute. July 14, 2006.
3. **Sapkota A.** Exposure Characterization and Biomarker Evaluation for 1,3-Butadiene. Division of Environmental Health Sciences, The Ohio State University College of Public Health, Columbus, Ohio. March 7, 2006.
4. **Sapkota A.** Indoor air pollution from solid fuels and risk of hypopharyngeal/laryngeal and lung cancers: a multicentric case-control study from India. UAB Epidemiology & Sparkman Seminar Series. University of Alabama Birmingham School of Public Health, March 31st 2008.
5. **Sapkota A,** Chelikowski A, Nachman K, Ritz B. Exposure to Particulate Matter and Adverse Birth Outcomes: A Comprehensive Review and Meta- Analysis. Expert Committee Meeting on Outdoor Air Pollution for the Global Burden of Disease, Harvard University, MA, April 2009.
6. **Sapkota A.** Indoor air pollution and cancer risk in low income countries. B.P. Koirala Memorial Cancer Hospital, Bharatpur, Chitwan Nepal. April 2009.
7. **Sapkota A.** Air Pollution and Adverse Respiratory Health Outcomes: How Does Epidemiology Work? Department of Atmospheric and Oceanic Science, University of Maryland, College Park, MD, October 29, 2009.

8. **Sapkota A.** Air Pollutants in Our Environment: From Sources to Health Effects. Smithsonian Resident Associate Program. Washington DC, March 5th, 2011.
9. **Sapkota A.** Indoor Air Pollution from Solid Fuels and Cancer Risk. Conference on Risk Assessment and Evaluation of Predictions. October 13, 2011, Silver Spring, MD.
10. **Sapkota A.** Exposure to Traffic Related Air Pollutants and Respiratory Health Outcomes. Environmental Justice and Environmental Health Disparities Symposium, College Park, MD, 2012.
11. **Sapkota A.** Household Air Pollution and Burden of Disease. Council on Environment, Inaugural Junior Faculty Award Lecture. College Park, MD September 11, 2013.
12. **Sapkota A.** Air Pollution and Respiratory Health. International Workshop on Urban and Regional Air Quality Shanghai, China. October 18, 2013
13. **Sapkota A.** Climate Change, Extreme Events and Salmonellosis – Are Coastal Area Truly Vulnerable? Department of Health and Mental Hygiene, Baltimore, MD. September 22, 2014
14. **Sapkota A.** Potential Public Health Impacts of Natural Gas Development and Production in the Marcellus Shale in Western Maryland. Maryland Environmental Health Network. Baltimore MD, September 12, 2014.
15. **Sapkota A.** Extreme Temperature Events and Risk of MI in Maryland. Department of Health and Mental Hygiene, Baltimore, MD. February 23, 2015.
16. Boyle M., Sangramurthy T, Wilson S, Sapkota A, Milton D, The Maryland Experience: Using HIA Methodology to Evaluate the Public Health Impacts Associated with Unconventional Natural Gas Development and Production, National HIA Conference, Washington DC, 2015
17. **Sapkota A.** Assessing Potential Health Impacts of Unconventional Natural Gas Development and Production Through Hydraulic Fracturing. Department of Environmental & Occupational Health, George Washington University Milken Institute School of Public Health, Washington DC. October 26<sup>th</sup>, 2015.
18. **Sapkota A.** Remote Sensing and Urban Health. Remote Sensing Integrated Assessment Modeling. Aspen Global Change Institute, Aspen CO. October 13<sup>th</sup>, 2015.
19. **Sapkota A.** Extreme Heat Events, Change in Phenology and Hay Fever. Invited Presentation. 2015 National Conference on Health Statistics, Bethesda MD. August 26<sup>th</sup>, 2015.
20. **Sapkota A.** Air Pollution and Respiratory Diseases – A LMIC Perspectives. Laboratory of Epidemiology and Population Science, National Institute on Ageing, Bethesda MD. August 19<sup>th</sup>, 2016
21. **Sapkota A.** Climate Change, Extreme Events and Impaired Health: Local to National Perspectives. National Center for Health Statistics, Hyattsville, MD. June 29<sup>th</sup>, 2016.



22. **Sapkota A.** Climate Change, Alteration in Plant Phenology and Allergic Diseases in the US. National Socio-Environmental Synthesis Center (SESYNC), Annapolis, MD. March 22<sup>nd</sup>, 2016.
23. **Sapkota A.** Climate Change and Public Health: The Need for Community-Specific Adaptation Strategies. Sun Yat-Sen University, Guangzhou, China, May 25<sup>th</sup>, 2017.
24. **Sapkota A.** Household Air Pollution and Lung Cancer Risk in Nepal. Embassy of the United States, Kathmandu, Nepal, June 12, 2017
25. **Sapkota A.** Extreme Events and Impaired Health: An Unequal Risk. Environmental Impacts on Health Readiness, US Army Public Health Center, Arlington VA, June 20<sup>th</sup>, 2017

#### **Refereed conference:**

1. **Sapkota A**, Geyh A, Moradian R and Buckley TJ. Traffic Related Indoor and Outdoor VOCs in an Urban Environment. International Society for Exposure Analysis 10th Annual Conference, Monterey California, October 2000.
2. **Sapkota A**, and Buckley TJ. The mobile source effect on curbside 1,3-butadiene, benzene, and particle-bound polycyclic aromatic hydrocarbons assessed at a tollbooth. The 95th Annual Conference of the Air and Waste Management Association, Baltimore, MD 2002.
3. **Sapkota A.**, and Buckley T.J. Mobile Source Related Personal Exposure to 1,3-Butadiene. International Society for Exposure Analysis 13th Annual Conference, Stresa Italy, September 2003.
4. **Sapkota A.**, Symons J.M., Kleissl J., Ondov J., and Buckley T.J. The Impact of Canadian Forest Fires on the Air Quality in Baltimore City: A Case Study of Long-Range Pollutant Transport. International Society for Exposure Analysis 13th Annual Conference, Stresa Italy, September 2003.
5. Brown S., **Sapkota A.**, Burke T., and Buckley T.J. Air toxin exposure, risk, and environment-related cancer in Maryland. American Public Health Association, 132nd Annual Meeting: Public Health and the Environment, Washington DC, November 2004.
6. **Sapkota A.**, Halden R., Groopman J.D., Dominici F., and Buckley T.J. Exposure Characterization and Biomarker Evaluation of 1,3-Butadiene Resulting from Automobile Exhaust. International Society for Exposure Analysis 14th Annual Conference, Philadelphia PA, October 2004.
7. Williams D, **Sapkota A.**, Geyh A, Hume E, Barnum B., Oxendrider J., Cahill C., and Breysse P.. Characterization of Particulate Matter in Different Bores of a Tunnel with Distinct Vehicle Composition and Concentrated Emissions. The joint annual conference of ISEA/ISEE. Paris, 2006.
8. **Sapkota A.**, Hashibe M., Dikshit R., Jetty D.H., Chattopadhyay U., Vendhan G., Brennan P., Boffetta P. Risk Factors of Hypopharyngeal/Laryngeal and Lung Cancer Among Indian Men. The 19th

International Conference on Epidemiology in Occupational Health. Banff, Alberta, Canada, October 2007

9. Rosenberg, R.E., Micallef, S.A., George, A., **Sapkota, A.**, Gibbs, S.G., Joseph, S.W., Sapkota, A.R. Irrigation workers' exposures to antimicrobial-resistant bacteria and antimicrobials present in reclaimed wastewater. American Public Health Association Annual Meeting, Philadelphia, USA. November, 2009.
10. Biswas S., McGrath J.M., **Sapkota A.** Characterization of Ionophores in Poultry litter and Litter Amended Soils Using Liquid Chromatograph Tandem Mass Spectrometer. Oral presentation at International Annual ASA-CSSA-SSA Joint Meeting, Pittsburgh, PA, Nov 1-5, 2009. (Abstract published)
11. Perodin, J., Hada, J., **Sapkota A.** Seasonal Variability In Particulate Matter Concentration In Kathmandu Valley. The 19th Annual Meeting of the International Society of Exposure Science. Minneapolis, USA. November 1-5, 2009.
12. **Sapkota A.**, Eftim S., Nachman KE., Kravets N., Shenassa E., Akinbami L., Parker J. Traffic Exposure and Asthma Exacerbation among a Nationally Representative Sample of the US Population. The joint annual conference of ISES/ISEE. Seoul, Korea. August 29-Sept 1, 2010.
13. Eftim S., Parker J., Kravets N., Nachman K., **Sapkota A.** Validation of Traffic Exposure Surrogates Against a Biomarker of Internal Dose among Non-Smoking US Population. The joint annual conference of ISES/ISEE. Seoul, Korea. August 29-Sept 1, 2010.
14. Parker J., Eftim S., Kravets N., Akinbami L., Shenassa E., **Sapkota A.** Disparities in traffic exposure in the United States. The joint annual conference of ISES/ISEE. Seoul, Korea. August 29-Sept 1, 2010.
15. Mehta S., Parker J., Akinbami L., Murtugudde R., **Sapkota A.**, Climate events and health outcomes: data linkage from two large national databases. The joint annual conference of ISES/ISEE. Seoul, Korea. August 29-Sept 1, 2010.
16. Biswas S., McGrath J.M., **Sapkota A.** Quantification of Aged Veterinary Anticoccidials in Poultry Manure using LC/MS/MS. Annual Bioscience Day, University of Maryland College Park, 2010.
17. Biswas S., McGrath J.M., **Sapkota A.** Quantification of Aged Veterinary Anticoccidials in Poultry Manure using LC/MS/MS. Oral presentation at International Annual ASA-CSSA-SSSA Joint Meeting, Long Beach, CA, Oct 31-Nov 4, 2010.
18. 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 by RE Rosenberg Goldstein, Water and Health: Where Science Meets Policy 2010 Conference, University of North Carolina at Chapel Hill, Chapel Hill, NC, October 2010.
19. 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.

20. Hashibe M, Siwakoti B, Thakur BK, Pun CB, Shrestha BM, Burningham Z, **Sapkota A**. Risk factors for lung cancer in Nepal. AACR Third Annual Science of Health Disparities Meeting, Miami, Florida. 2010
21. Hashibe M, Siwakoti B, Wei M, Thakur BK, Pun CB, Shrestha BM, Burningham Z, Lee YA, **Sapkota A**. Disparities in lung cancer in the Nepalese population. American Society for Preventive Oncology Annual Meeting, Las Vegas, Nevada. 2011
22. Mehta S., Parker J., Murtugudde R., **Sapkota A**. Application of climate indicators to US child population: trends in temperature variability. Abstract accepted for presentation at the International Society for Environmental Epidemiology 23rd Annual Meeting, Barcelona, Spain, September 13-16, 2011
23. Parker J., Mehta S., Murtugudde R., **Sapkota A**. Linkage of US National Health Interview Survey to climate indicators: a resource for understanding the impact of change. The annual conference of ISEE. Barcelona Spain. September 13-16, 2011
24. Romeo C., Mehta S., Parker J., **Sapkota A**. Indicators for Examining Potential Chronic Respiratory Effects of Climate Change. The annual conference of ISES. Baltimore Maryland. October 23-27, 2011
25. Fransen M.J., Perodin J., He X., **Sapkota A**. Influence of weekdays, weekends, bandhas and weather conditions on particulate matter (PM10) concentrations in the Kathmandu Valley in Nepal. The annual conference of ISES. Baltimore Maryland. October 23-27, 2011
26. 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. American Society for Microbiology 111th General Meeting, New Orleans, LA, May 2011.
27. Romeo, C., Mehta, S., Parker, JD., **Sapkota, A**. Indicators for Examining the Potential Chronic Respiratory Effects of Climate Change. NSF/AAAS Emerging Researchers National (ERN) Conference in STEM 2nd Annual Meeting, Atlanta, Georgia, February 23-26, 2011.
28. Biswas S., McGrath J.M., **Sapkota A**. Quantification of Ionophores in Poultry litter using Liquid Chromatograph Tandem Mass Spectrometric technique. Poster presentation at 7th Annual LC/MS/MS workshop on Env. Appl. and Food Safety, Buffalo, NY. June 13-14, 2011.
29. Biswas S. , McGrath J.M., **Sapkota A**. Ionophore sorption in coastal plain soils- preliminary study. Presentation at the International Annual ASA-CSSA-SSSA Joint Meeting, Cincinnati, Ohio. October 21-24, 2012.
30. Montresor-Lopez J., Yanosky J., **Sapkota A.**, He X., Hibbert J., Puett R. Short-term Effects of Ambient Ozone on Stroke Risk in South Carolina, USA. Joint ISEE/ISES and ISIAQ Conference, Basel, Switzerland. August 19-23, 2013.

31. Romeo, C., Murtugudde R., Parker, JD., **Sapkota, A.** Exposure to an Aggregate Climate Change Metric and Respiratory Health Outcomes in the Continental US. Joint ISEE/ISES and ISIAQ Conference, Basel, Switzerland. August 19-23, 2013
32. Sapkota AR., Jiang C., Blythe D., **Sapkota A.** Increased Frequency of Unusually Hot Days and Foodborne Illness in Maryland. Joint ISEE/ISES and ISIAQ Conference, Basel, Switzerland. August 19-23, 2013
33. Raspanti G., Siwakoti B, Thakur BK, Pun CB, Shrestha BM, Hashibe M., **Sapkota A.** Traditional vs. Commercial Tobacco Use and Lung Cancer Risk in Nepal. 141<sup>st</sup> annual meeting of the American Public Health Association, Boston, MA. November 2-6, 2013.
34. Raspanti G., Siwakoti B, Thakur BK, Pun CB, Shrestha BM, Hashibe M., **Sapkota A.** Urinary Biomarker of Household Air Pollution: Findings from Nepal. International Society of Exposure Science 24<sup>th</sup> Annual Meeting. Cincinnati OH, October 12-16, 2014.
35. Raspanti G., Siwakoti B, Thakur BK, Pun CB, Shrestha BM, Hashibe M., **Sapkota A.** The Influence of Cooking Fuel on Lung Cancer Risk in Nepal. 26<sup>th</sup> Annual Meeting of the International Society for Environmental Epidemiology. Seattle, August 24-28, 2014.
36. 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.
37. Soneja S, Jiang C, Romeo C, Mitchell C, **Sapkota A.** Risk of hospitalization for asthma related to extreme temperature and precipitation events in Maryland. 27th Conference of the International Society for Environmental Epidemiology (ISEE). Sao Paolo, Brazil. August 30-September 3, 2015.
38. Fisher JA, Jiang C, Upperman C, Mitchell C, Murtugudde R, Puett R, **Sapkota A.** Extreme heat in summer and acute myocardial infarction hospitalizations in Maryland. 27th Conference of the International Society for Environmental Epidemiology (ISEE). Sao Paolo, Brazil. August 30-September 3, 2015.
39. Upperman C, Parker JD, Akinbami L, Jiang C, He X, Murtugudde R, Curriero F, Ziska L, Sapkota A. The Risk of Exposure to Climate Specific Extreme Heat and Hay Fever Prevalence Among Adults in the Continental United States: Linkage of the National Health Interview Survey. Oral Presentation. 25<sup>th</sup> Annual Meeting of the International Society of Exposure Science (ISES). Henderson, Nevada. October 18-22, 2015.
40. 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. 25<sup>th</sup> Annual Meeting of the International Society of Exposure Science (ISES). Henderson, Nevada. October 18-22, 2015.
41. Soneja S, Jiang C, Romeo C, Mitchell C, **Sapkota A.** Vulnerability Assessment for Hospitalization Due to Asthma and Exposure to Extreme Weather Events in Maryland. Oral Presentation. 25<sup>th</sup> Annual

Meeting of the International Society of Exposure Science (ISES). Henderson, Nevada. October 18-22, 2015.

42. Jiang C, Sapkota A, Curriero F. Extreme Temperature Events and Onset of Greening in the Eastern US: Implications for Respiratory Diseases. Poster Presentation. 25<sup>th</sup> Annual Meeting of the International Society of Exposure Science (ISES). Henderson, Nevada. October 18-22, 2015.
43. 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, 28<sup>th</sup> Conference of the International Society for Environmental Epidemiology (ISEE). Rome, Italy. September 1-4, 2016.
44. Soneja S, Liu A, Jiang C, Huang C, Mitchell C, Beck K, **Sapkota A**. Frequency of Extreme Events and Injury Risk From Motor Vehicle Accidents in Maryland, USA. Poster Presentation, 28<sup>th</sup> Conference of the International Society for Environmental Epidemiology (ISEE). Rome, Italy. September 1-4, 2016.
45. **Sapkota A**, Parker J, Akinbami L, Curriero F, Ganguly S, Ziska L, Murtugudde R, Jiang C. Alteration in plant phenology and hay fever prevalence among US adults: combined evidence from satellite data and National Health Interview Survey 2002-2013. Oral Presentation, 28<sup>th</sup> Conference of the International Society for Environmental Epidemiology (ISEE). Rome, Italy. September 1-4, 2016.
46. Khanjani N, Jiang S, Soneja S, Asrar G, **Sapkota A**. Assessing the Impact of the El Niño Southern Oscillation Phenomenon upon Extreme Weather/Climate Events at the Local and Regional Level Across the Contiguous United States. Oral Presentation, 26<sup>th</sup> Annual Meeting of the International Society of Exposure Science (ISES). Utrecht, Netherlands. October 9-13, 2016.
47. 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.
48. Boyle M, Soneja S, Quiros-Alcala L, Sapkota AR, Dalemarré 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, 26<sup>th</sup> Annual Meeting of the International Society for Exposure Science (ISES). Utrecht, Netherlands. October 21, 2016.

#### **Non-Refereed Conference Proceedings & Local Presentations**

1. Sapkota A, Nachman K, Perodin J, Ritz B, Shenessa E. Exposure to Traffic Exhaust and Asthma Exacerbation: A Systematic Meta Analysis. University of Maryland, Graduate Student Research Interaction Day, College Park, Maryland, April, 2008.
2. 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 School of Public Health, Research InteractionDay. College Park, MD. September 2009.

3. 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.
4. 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.
5. Rosenberg Goldstein RE, Micallef SA, George A<sup>#</sup>, **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.
6. **Sapkota A**. Air Pollution and Respiratory Health. Johns Hopkins School of Advanced International Studies. Washington DC. September 29, 2011.
7. **Sapkota A**. Indoor Air Pollution from Solid Fuels and Cancer Risk. Conference on Risk Assessment and Evaluation of Predictions. October 13, 2011, Silver Spring, MD
8. Biswas S., McGrath J.M., **Sapkota A**. Quantification of Ionophores in Poultry litter using Liquid Chromatograph Tandem Mass Spectrometric technique. Oral presentation at ASA-CSSA-SSA NE Branch Meeting, Maryland, 2011.
9. Romeo C, Parker J., Murtugudde R., **Sapkota A**. Indicators for Examining the Potential Chronic Respiratory Effects of Climate Change. University of Maryland, Graduate Student Research Interaction Day, College Park, Maryland, April 11, 2012.
10. Raspanti G., Siwakoti B, Thakur BK, Pun CB, Shrestha BM, Hashibe M., **Sapkota A**. Traditional vs. Commercial Tobacco Use and Lung Cancer Risk in Nepal. Public Health Research Day, University of Maryland College Park, April, 2013
11. Raspanti G., Siwakoti B, Thakur BK, Pun CB, Shrestha BM, Hashibe M., **Sapkota A**. Ethnic Variation in Consumption of Traditional Tobacco and Risk of Lung Cancer in Nepal . Public Health Research Day, University of Maryland College Park, April, 2014
12. Milton D., Wilson S., Boyle M., Sangramurthy T., **Sapkota A**. Marcellus Shale Public Health Study Final Progress Report. Garrett College, McHenry, MD. June 28, 2014
13. Sapkota A. Potential Public Health Impacts of Natural Gas Development and Production in the Marcellus Shale in Western Maryland. Environmental Justice Symposium, College Park, MD. December, 2014.
14. Fisher JA, Jiang C, Upperman C, Mitchell C, Murtugudde R, Puett R, Sapkota A., Extreme Temperature Events (summertime) and Acute Myocardial Infarction in Maryland, Public Health Research at Maryland Day, College Park, MD, 2015
15. Soneja S, Jiang C, Romeo C, Mitchell C, Sapkota A., Does the Frequency of Extreme Weather Events Impact Campylobacteriosis Risk?, Public Health Research at Maryland Day, College Park, MD, 2015

16. Sapkota, A., Climate Change, Extreme Temperature Events and Chronic Diseases, Public Health Research at Maryland Day, College Park, MD, 2015
17. **Sapkota A.** Climate Change and Allergic Diseases: A Disparity in Risk. Climate Action 2016/Forum. Panel on Climate Change Resilience/Adaptation. College Park, MD. May 4<sup>th</sup> 2016.
18. **Sapkota A.** Climate Change and Human Health: Local and National Perspectives. Maryland Climate Coalition, Climate Stewards of Greater Annapolis. Annapolis, MD, March 17<sup>th</sup> 2016.
19. Kulkarni P\*, Olson N\*, Raspanti G\*\*, Sapkota A, **Sapkota AR<sup>†</sup>**. 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.

## Funding

### Ongoing:

- |            |                                                                                                                                                                                                                                                                                                                         |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1/17-6/17  | Fulbright Senior Researcher Scholarship, Nepal. A Joint Collaboration To Address Household Air Pollution and Lung Cancer Risk in Nepal<br>Sponsor: U.S. Department of State<br>Role: PI                                                                                                                                 |
| 3/16-3/20  | CONSERVE: A Center of Excellence at the Nexus of Sustainable Water Reuse, Food and Health (Award #2016-68007-25064)<br>Sponsor: U.S. Department of Agriculture, National Institute for Food and Agriculture<br>Total Center costs: \$10,000,000<br>Role: Laboratory Core Director and Co-Investigator (PI: Amy Sapkota) |
| 3/13-9/17  | <i>"Maryland Public Health Strategy for Climate Change"</i><br>Sponsor: Maryland Department of Health and Mental Hygiene<br>Total Cost: <b>\$545,338</b><br>Role: Principal Investigator                                                                                                                                |
| 8/15 -7/17 | "ScienceBEAT: An Innovative Educational Partnership to Increase Understanding of Climate Change".<br>Sponsor: UMD Council on Environment<br>Total Cost: \$120,000<br>Role: Co-Investigator.                                                                                                                             |

### Pending:

- |           |                                                                                                                                                       |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5/18-4/23 | The Chesapeake Bay Center for Water and Human Health<br>Sponsor: National Institute of Environmental Health Sciences and National Science Foundation. |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|

Total Cost: 9,000,000.00  
Role: Principal Investigator

Completed:

- 5/13-4/16      *"National Scale Assessment of the Impact of Climate Change on Asthma Morbidity.*  
Sponsor: National Institute of Environmental Health Sciences  
Total Cost: **\$417,220** [Grant # 1R21ES021422-01A1]  
Role: Principal Investigator
- 2/15 – 1/17      *"Testable Exosome Signatures of Influenza Threats"*  
Sponsor: Intelligence Advanced Research Project Activity (IARPA)  
Total Cost: \$4,997,120  
Role: Co-Investigator (PI: Dr. Milton)
- 8/13-5/14      *"Marcellus Shale Public Health Report"*  
Sponsor: Maryland Department of Health and Mental Hygiene  
Total Cost: **\$160,000**  
Role: Co-Investigator (PI Dr. Milton)
- 4/13-3/14      *"Quantifying human health effects from climate change in an integrated assessment model"*  
Sponsor: ADVANCE Program Interdisciplinary and Engaged Research Seed Grant  
Total Cost: \$20,000  
Role: Co-Investigator (PI: Dr. Gilmore)
- 9/09-10/10      *"Linkage of Meteorological Data with NHIS Respondents for Research on Climate Change and Respiratory Health Outcomes"*  
Sponsor: Centers for Disease Control and Prevention  
Total Cost: **\$70,000**  
Role: Principal Investigator
- 6/09-2/12      *R03, "Spray irrigation workers' exposures to antibiotic-resistant bacteria and antimicrobials from reclaimed wastewater."*  
Sponsor: National Institute for Occupational Safety and Health, R03 Small Grants Program, [Grant # 1-R03-OH009598-01]  
Total Cost: **\$150,000**  
Role: Co-Investigator
- 01/09-12/10      *"Environmental Risk Factors of Lung Cancer in Low to Middle Income Countries"*  
Sponsor: International Agency for Research on Cancer (IARC)  
Total Cost: **\$25,000**  
Role: Co-Principal Investigator (additional Co-PI: Dr. Mia Hashibe)
- 06/08-09/09      *"Investigation of Air Quality Around Public Schools"*  
Sponsor: USA Today  
Total Cost: **\$35,000**



Role: Principal Investigator

- 7/09-6/10      *"Occupational Exposure of Bus Drivers to Volatile Organic Compounds and Particulate Matter"*  
Sponsor: National Institute for Occupational Safety and Health, Education and Research Center, Pilot Project Research Training Award.  
Total Cost: **\$6,000**
- 08/02-07/04      *"Assessment of Highway Toll Booth Worker's Exposures to 1,3-Butadiene"*  
Sponsor: National Institute for Occupational Safety and Health, Education and Research Center, Pilot Project Research Training Award  
Total Cost: **\$20,000**  
Role: Principal Investigator
- 08/00-08-03      *"Mobile Source Effect on Ambient Concentration of Hazardous Air Pollutants"*  
Sponsor: National Institute for Occupational Safety and Health, Education and Research Center, Pilot Project Research Training Award "," (Grant # T42/CCT310419).  
Total Cost: **\$20,000**  
Role: Principal Investigator
- 08-02-08-03      *"Exposure to Mobile Source Related Air Pollutants among Inner City Baltimore Residents."*  
Sponsor: Johns Hopkins University Risk Sciences and Public Policy Institute, Pilot Project Award  
Total Cost: **\$5,000**

## Honors and Awards

1. Clark University International Scholarship, 1993-1998
2. Clark University, Deans List (First Honors), 1993, 1994, 1997
3. International Society for Exposure Analysis Travel Scholarship, 2000
4. The Johns Hopkins School of Hygiene and Public Health Scholarship, 1999-2004
5. Cornelius W. Kruse Award for Outstanding Graduate Studies, Johns Hopkins University, 2004
6. Research Training Fellowship Awardee, International Agency for Research on Cancer, 2005
7. Delta Omega, Alpha Chapter, Honorary Public Health Society, 2012
8. Council on Environment, Junior Faculty Award, 2013.  
(This award recognizes the most promising young faculty member who has made a significant impact on environmental issues).
9. Honoree, 7<sup>th</sup> Annual University-Wide Celebration of Scholarship & Research, University of Maryland College Park, May 2014.
10. Honoree, 8<sup>th</sup> Annual University-Wide Celebration of Scholarship & Research, University of Maryland College Park, May 2015.
11. Honoree, 9<sup>th</sup> Annual University-Wide Celebration of Scholarship & Research, University of Maryland College Park, May 2016.
12. Fulbright Senior Research Scholar to Nepal. U.S. Department of States, 2017

**Editorial Board:**

1. Frontiers in Oncology
2. SWJ Public Health

**Reviewing Activities:**

Environmental Health Perspectives  
 Environmental Research  
 Environment Science & Technology  
 Water Research  
 EcoHealth  
 Air Quality, Atmosphere and Health  
 Chemosphere  
 Cancer Causes and Control  
 Frontiers in Oncology  
 Journal of Occupational and Environmental Hygiene  
 Air and Waste Management Association

**Teaching**Courses taught as the primary instructor in the last five years

Fall 2007	Course relief	Recruitment package		
Spring 2008	MIEH771	Exposure Assessment	4 Students	3 credits
	MIEH789	Independent Study	1 Student	3 credits
Fall 2008	MIEH740	Env. Health Risk Assessment	5 Students	3 credits
	MIEH785	Internship Public Health	1 Student	3 credits
Spring 2009	MIEH771	Exposure Assessment	4 Students	3 credits
	MIEH785	Internship Public Health	2 Students	3 credits
	MIEH799	Masters Thesis Research	1 Students	6 credit
Fall 2009	MIEH740	Env. Health Risk Assessment	10 Students	3 credits
Spring 2010	HONR268C	Public Health Perspectives	18 Students	3 credits
	MIEH771	Exposure Assessment	4 Students	3 credits

Summer 2010: The Concept and Practice of Risk Assessment and Molecular Epidemiology in Public Health, July 12-16, 2010, **Fudan School of Public Health, Shanghai, China**. Taught one week Risk Assessment course to 40 graduate students, researchers, and faculty members. This course was organized by Dr. Deliang Tang at the Columbia University Mailman School of Public Health.

Fall 2010	MIEH740	Env. Health Risk Assessment	2 Students	3 credits
	MIEH785	Internship Public Health	1 Student	3 credits
	MIEH786	Capstone Project MPH	1 Student	3 credits
	MIEH788	Critical Reading in EH	1 Student	1 credit

	MIEH789	Independent Study	2 Students	1 credit
Spring 2011	MIEH600	Foundations of Env. Health	13 Students	3 credits
	MIEH771	Exposure Assessment	12 Students	1 credit
	MIEH788	Critical Reading in EH	1 Student	1 credit
	MIEH789	Independent Study	1 Student	1 credit
	MIEH799	Masters Thesis Research	1 Student	1 credits
Fall 2011	ENST446/MIEH440	Env. Health Risk Assessment	15 Students	3 credits
	MIEH609	Methods in Toxicology	1 Student	1 credit
	MIEH740	Env. Health Risk Assessment	13 students	3 credit
	MIEH785	Internship Public Health	2 Students	3 credits
Spring 2012	HONR268C	Public Health Perspectives	20 Students	3 credits
	MIEH771	Exposure Assessment	5 Students	3 credits
	MIEH786	Capstone Project in Env. Health	1 Student	3 credits
	MIEH789	Independent Study	1 Student	1 credit
	MIEH799	Masters Thesis Research	2 Students	3 credits
Summer 2012	MIEH600	Foundations of Env. Health	10 Students	3 credits
Fall 2012	EPIB899	Doctoral Dissertation Research	1 Student	6 credits
	MEES898	Independent Study	1 Student	1 credit
	MIEH309	Env. Health Research	2 Students	1 credit
	MIEH740	Env. Health Risk Assessment	7 Students	3 credits
	MIEH785	Internship Public Health	1 Student	3 credits
	MIEH788	Critical Readings in Env. Health	1 Student	1 credit
	MIEH898	Pre-Candidacy Research	1 Student	1 credit
Spring 2013	MIEH309	Env. Health Research	2 Students	3 credits
	MIEH609	Methods in Toxicology	1 Student	3 credits
	MIEH771	Exposure Assessment	8 Students	3 credits
Summer 2013	MIEH600	Foundations of Env. Health	11 Students	3 credits

### **Course or Curriculum Development**

Overall One of the first two tenure track faculty members hired at the Maryland Institute for Applied Environmental Health when the decision was made to have an accredited School of Public Health at the College Park campus. As such, I have played a major role in the curriculum development for MPH and PhD program in Environmental Health

### **New Graduate Courses Developed**

MIEH 600 Foundations of Environmental Health  
Role: Developed this course from scratch when the previous instructor retired.

MIEH 740 Human Health Risk Assessment

Role: Developed this new course from scratch as a part of the new MPH program in Environmental Health.

MIEH 771      Exposure Assessment  
Role: Developed this new course from scratch as a part of the new MPH program in Environmental Health.

e-MIEH600      Online MIEH600  
Role: Led the development of e-MIEH600 (online) course for the new e-MPH degree in Health Services Administration.

### **New Undergraduate Courses Developed**

MIEH440/ENST446 Human Health Risk Assessment  
Role: Created an undergraduate version of the MIEH740.

HONR268C      Public Health Perspectives  
Role: Developed a complete new course for the undergraduate honors student.

### **Guest Lectures**

MIEH 600      Principles of Environmental Health (2 lectures per year)

MIEH 300      Introduction to Environmental Health (1 lecture per year, 2011-2012)

MIEH720      Principles of Toxicology (One guest lecture 2008-2009)

Exchange      International Exchange Program with Kyung Hee University (Korea) entitled "Engineering Technology and Public Health" (Undergraduate program) (Two guest lectures in environmental health). Summer 2012 and Summer 2013.

### **Mentoring and Advising**

#### Undergraduate Research Advising

Amee Raval      Spring 2010-Spring 2013. Major in Environment Science and Technology.  
Howard Hughes Medical Institute Undergraduate Research Fellowship (2011)

Sadia Nmn Goheer      Fall 2010-Spring 2011. Major in Analytical Chemistry

Roma Desai      Fall 2011-Spring 2012. Major in Environment Science and Technology.

William N. Dade      Summer 2011. UMSTAR Fellow from the North Carolina Agricultural and Technical State University.

Jin Seok Kim      Spring 2012-Spring 2013. Major in General Biology, May 2013. Went on to Graduate School.

Jeongkyun Lee                      Spring 2013-Present. Major in Biology, May 2015.

Graduate Research Advising

Post-doctoral

Sorina Eftim                      Fall 2009-Spring2010. Currently at Inner City Fund (ICF) International.

Chengsheng Jiang              Spring 2013-Present. Currently Research Assistant Professor, Maryland Institute for Applied Environmental Health.

PhD Students, Major Advisor

*(PhD Program was started in the Maryland Institute for Applied Environmental Health after Spring 2012)*

Bradley Kerridge              Fall 2009-Spring 2013. Dissertation title: *Terrorism, Civil War, One-Sided Violence and Global Burden of Disease* . Pre-doctoral National Research Service Award (NRSA) Fellowship, National Institutes of Health, 1-F31 DA025377-01. 2013. Currently a USAID/PHI Fellow.

Crystal Romeo                  Spring 2010-Present.     NSF Louis Stokes Alliance for Minority Participation (LSAMP) Fellowship (2010-2012). Travel Award: Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (2011), NSF Alliances for Graduate Education and the Professorate (AGEP) Travel Award – registration, airfare, and lodging (2011).

Saptashati Biswas              Fall 2009 – 2014 (Co-Advisor: Dr. Josh McGrath). Gest Grad Student of the Year by S-11 division, Soil Science Society of America (2010); Second position in BioScience Day poster competition (2010); Traval Award, International ASA-CSSA-SSSA Joint Meeting (2010); Outstanding Graduate Student Award (PhD) by Department of Environmental Science and Technology, University of Maryland-College Park (2011); Summer Research Fellowship, Graduate School, University of Maryland-College Park (2011); 2nd Position in Poster Competition at ASA-CSSA-SSSA North East Branch Meeting, at Chesapeake Beach, MD (2011).

Greg Raspanti                  Fall 2012 – Present. First Place in Health Section for original research poster “Traditional vs. Commercial Tobacco Use and Lung Cancer Risk in Nepal”– Graduate Research Interaction Day UMD April, 2013; Elected President of Delta Omega honorary public health organization– October, 2012; Dean’s Fellowship Award – August, 2012; University of Maryland Center for Teaching Excellence Distinguished Teaching Assistant Award 2011-2012 – May, 2012

Committee Member, PhD Students

Ryan L. Sheppard              Androgen receptor polyglutamine repeat length affects receptor activity and C2C 12 cell myogenic potential. 2010.

Sankar Sambandam	Developing Exposure Assessment Methods for Indoor Air Pollutants from Household Combustion of Solid Fuels in Rural Areas of Southern India. <b>Sri Ramchandra University</b> , Dept. of Environmental Health Engineering, Chennai, India.
Sarah A. Evans	Nuclear Reactions – Testing a Message-Centered Extension of Enduring Predictions About Expert and Lay Person Perceptions of and Reactions to Risk. 2011
Rachel R. Goldstein	Antibiotic-Resistant Bacteria in Wastewater and Potential Human Exposure Through Wastewater Reuse. 2013
Jarim Kim	The Impact of Consideration of Future Consequences and Temporal Framing on Acceptance of the HPV Vaccine. May 2014.
Kristen N. Burwell	Fall 2012 – Present.

Major Advisor, Master of Public Health (MPH) Students (\* denotes Thesis)

Joanne Perodin	Fall 2007-Spring 2009. Thesis title: <i>Cross sectional evaluation of potential Volatile Organic Compound exposures around Schools*</i> . Currently employed at the Children's Environmental Health Network.
Adam Chelikowsky	Fall 2009-Spring 2011. Integration and Migration of Manufacturing Operations from Camarillo to Frederick; an EHS Perspective
Michelle Fransen	Fall 2010-Spring 2012. Thesis titled: <i>Influence of weekdays weekends, bandhas and weather conditions on particulate matter concentrations in the Kathmandu Valley Nepal*</i> . Currently employed at OEM Advisor LLC.
Job Sterling	Fall 2010-Spring 2012. Capstone project titled: <i>Indoor/outdoor volatile organic compound concentrations in the inner city Washington DC – A comparative analysis</i> . Currently working at Habitat for Humanity.
Greg Raspanti	Fall 2010-Spring 2012. Thesis titled: <i>Environmental Impacts on Fecal Indicator Bacteria in 5 National Parks*</i> . Currently enrolled as a Doctoral Student at UMD-SPH.
Cynthia Bashore	Fall 2010 –Summer 2012. Thesis titled: <i>Maternal mercury exposure, season of conception and adverse birth outcomes in an urban immigrant community in New York City*</i> . Currently employed as Veterinary Medical Officer at the Division of Human Food Safety, Center for Veterinary Medicine, Food and Drug Administration.
Chris Caler	Fall 2011-Spring 2013. Capstone project title: <i>Containment testing of compressed gas cylinders within chemical fume hoods – are lecture bottles safe?</i> Currently employed at Indian Health Services.

Hsin Chieh Wu	Fall 2011-Spring 2013. Thesis Titled: <i>Climate Change, pollen levels and emergency department Visits for asthma in Maryland*</i> . Currently employed at the Maryland Department of Health and Mental Hygiene.
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Rebecca Braun	Fall 2010-Spring 2013. Thesis title: <i>Alcohol exposure in preterm infants in neonatal isolettes*</i> . Currently employed at Booze Allen Hamilton.
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Master Students, Committee Member or Minor Advisor on Special Project

Erinna Kinney	Fall 2007-Spring 2009. Thesis titled: <i>Isolation, identification and antimicrobial susceptibility analysis of Enterococcus spp. and Salmonella spp. From conventional poultry farms transitioning to organic farming practices.</i>
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Patrick Wallace	Fall 2007-Spring 2009. Project title: <i>Developing a Risk Based Remediation Strategy for Underground Storage Tanks using Geographical Information Systems.</i>
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Meredith Jenkins	Fall 2008-Spring 2011. On Achieving and Maintaining OSHA Voluntary Protection Programs Star Certification.
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Mitiku W. Dossa	Fall 2008-Spring 2010. Water pollution and public health hazards in Ethiopia.
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Rachel Goldstein	Fall 2008-Spring 2010; Thesis titled " <i>Evaluation of antibiotic-resistant bacteria in tertiary treated wastewater, reclaimed wastewater used for spray irrigation, and resulting occupational exposures</i> ".
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Kristie Trousdale	Fall 2008-Spring 2010
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Mack A. Frost	Fall 2009 – Spring 2011
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Jessica M. Lopez	Fall 2011-Spring 2013. Thesis title: <i>Short-term Effects of Ambient Ozone on Stroke Risk in South Carolina.</i>
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Rianna T. Murray	Fall 2011-Spring 2013. An Assessment of Exposure to Pollution by Recreational Users of the Anacostia Water Watershed – Project RECREATE. 2013
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**Service**

Service to Academic and Public Health Communities

2008	Advised the office of State Delegate James Hubbard on Bisphenol A
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2009-2011	Committee member, Maryland Comprehensive Cancer Control Plan, Maryland Department of Health and Mental Hygiene.
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2011	Johns Hopkins University, NIEHS Center Pilot Project Reviewer.
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2011	Member, Health Burden of Indoor Air Pollution on Women and Children in Developing Countries. NIH led trans-agency workshop.
2013-14	Member of workgroup on Cancer Clusters and Environmental Causes of Cancer, Department of Health and Mental Hygiene.
2014	Reviewer of APT Evaluation for Research Assistant Professor, University of California at Los Angeles.

#### Departmental Service

##### *Search Committees*

2008	Tenure Track Faculty, Department of Epidemiology and Biostatistics.  Director, Maryland Institute for Applied Environmental Health
2009	Director, Maryland Institute for Applied Environmental Health
2009	Program Director, Undergraduate Public Health Program at the Shady Grove Campus
2010	Three tenure-track positions at the assistant/associate level; Maryland Institute for Applied Environmental Health.
2011	Chair, Department of Epidemiology and Biostatistics
2014	Tenure Track Faculty (2), Department of Epidemiology and Biostatistics.

##### *Other MIAEH Service*

2007-Present	Director, Graduate Program, MIAEH
2007-2013	Chair, Graduate recruitment and admissions committee
2007-2014	Curriculum development for MIAEH MPH and PhD programs
2007-2014	Competencies development for MIAEH MPH and PhD programs
2007-2013	Biological/Chemical Safety Committee
2007-2014	Committee on Adjunct/Affiliate Faculties
2009-2011	Colloquium Committee
2009-2011	Award Committee
2011-2014	Grievance Committee
2009	Organizer, MIEH Seminar Series
2015	Member, Appointment Promotion and Tenure (APT) Committee.



### School and University Service

2008-Present	Member, Graduate Public Health (GPH) Committee
2009	Member, UMD-SPH Team for the SPH accreditation site visit by CEPH.
2011	UMD-President's China Task Force Committee
2013	Member of Subcommittee on Curricula Alignment, UMD-UMB Collaborative School of Public Health, MPowering the State.
2014-Present	Member, Radiation Safety Committee
2014	Reviewer, Council on Environment (ConE) Pilot Project Awards.
2015	Member of Search Committee: Dean, School of Public Health
2015-2016	Member, Climate Implementation Summit
2015	Member, MPRC Grant Review, 2015
2015	Co-Chair of a panel of Climate and Health, UMB-UMD Research Day

### Community, State, National and International

2005-2007	IARC Monographs (Volume 93: Carbon black, Titanium dioxide, and Talc and Volume 95: Household use of solid fuels and high-temperature frying), participated as IARC Secretariat.
2008	Dietary Exposure Assessment Tools for Prioritizing Food Safety Concerns, FDA-JIFSAN
2009	Conference Co-Chair. Emerging Contaminants (Pharmaceuticals and Personal Care Products) and Organohalogens in Wastewater and Municipal Biosolids. 238th American Chemical Society (ACS) National Meeting August 16-20, 2009 Washington, DC, USA
2009-2010	Member of external review panel for <i>Toxicological Profile for 1,3-Butadiene</i> . Agency for Toxic Substance and Disease Registry.
2008-2011	Member of workgroup on <i>Maryland Comprehensive Cancer Control Plan</i> . Maryland Department of Health and Mental Hygiene
2010	Member of Review Panel, US Environmental Protection Agency, NCER Grant Review EPA-G2010-STAR-B1.
2011	Member, Organizing Committee. Annual International Society for Exposure Science Conference (ISES), Baltimore.
2011-2012	Expert committee member, NIH Panel to prioritize research opportunities in Indoor Air Pollution

2012	Member, International Scientific Committee. 7 <sup>th</sup> International Conference on the Science of Exposure Assessment. Edinburgh, Scotland.
2008-2012	Member, Expert committee on outdoor air pollution, Global Burden of Disease. The Institute for Health Metrics and Evaluation
2008-2012	Member, Expert committee on indoor air pollution, Global Burden of Disease. The Institute for Health Metrics and Evaluation
2013	Member, Review Panel. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control (NCIPC), Special Emphasis Panel (SEP).
2014	Co-Author, Marcellus Shale Public Health Study. Prepared for the Marcellus Shale Safe Drilling Initiative Advisory Commission.
2015	Member, NIH Review Panel: Pediatric Research Using Integrated Sensor Monitoring Systems (PRISMS): Sensors Development Project For Asthma (U01)
2015	Member, NIOSH Review Panel, 2015
2015	Panel member, Council of State and Territorial Epidemiologists: Pollen Summit, Portland Maine.
2016	Member, NIH Review Panel: Pulmonary, Cardiovascular and Musculoskeletal Epidemiology (ZRG1 PSE-H 02).
2016	Member, NIH Review Panel: Environmental Influences on Child Health Outcomes (ECHO) program - Pediatric Cohorts