

CURRICULUM VITAE

Jo Anne G. Balanay, MOH, MS, PhD, CIH

Professor

Environmental Health Sciences Program
Department of Health Education and Promotion
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FIELD OF EXPERTISE/ TOPICS OF RESEARCH INTEREST

- Occupational exposure assessment
- Noise exposure assessment
- Heat stress assessment
- Solar ultraviolet radiation exposure assessment
- Respiratory protection

EDUCATION

PhD in Environmental Health – Industrial Hygiene, May 2011

University of Alabama at Birmingham (UAB), Birmingham, AL, U.S.A.

- Dissertation: Adsorption Characteristics of Activated carbon Fibers (ACFs) for Toluene
- GPA: 4.0 out of 4.0

Master of Occupational Health, May 2005

University of the Philippines, Manila, Philippines

Master of Science in Environmental Health – Industrial Hygiene, June 2003

University of Minnesota, Minneapolis, MN, U.S.A.

- Thesis: Assessment of Volatile Organic Compounds Exposure among Jeepney Drivers in Manila, Philippines
- Graduated with recognition (Outstanding Academic Achievement Award), GPA: 3.844 out of 4.0

Bachelor of Science in Public Health, April 1997

University of the Philippines, Manila, Philippines

- Graduated cum laude

PROFESSIONAL CERTIFICATION

Certified Industrial Hygienist (CIH), 2008 – present

American Board of Industrial Hygiene (ABIH), certification number: 9551

WORK EXPERIENCE

Professor

Environmental Health Sciences Program, Department of Health Education and Promotion, College of Health and Human Performance, East Carolina University, Greenville, NC

August 2022 – Present

Associate Professor

Environmental Health Sciences Program, Department of Health Education and Promotion, College of Health and Human Performance, East Carolina University, Greenville, NC

August 2016 – Present

Assistant Professor

Environmental Health Sciences Program, Department of Health Education and Promotion, College of Health and Human Performance, East Carolina University, Greenville, NC
August 2011 – 2016

Research Associate

Department of Environmental Health Sciences, School of Public Health, University of Alabama at Birmingham
September 2006 – August 2011

Assistant Professor

College of Public Health, University of the Philippines Manila, Philippines
December 2003 – October 2005

University Research Associate

College of Public Health, University of the Philippines Manila, Philippines
February 1998 – December 2003

Project Research Assistant

College of Public Health, University of the Philippines Manila, Philippines
“Eye Injury in Industrial Establishments”
September 1997 – January 1998

PRODUCT INNOVATION

“Temper”: A WBGT-based Heat Stress App

- ECU invention ID IP2402 and technology ID TT2402
- Copyright registration # TX 9-376-326 (awarded by the U.S. Copyright Office on April 2, 2024)
- Description: This web app prototype is a promising tool in assessing heat stress among outdoor workers by automatically calculating the wet-bulb-globe temperature (WBGT) index using weather data and by providing corresponding heat stress risk levels. This app is licensed to the American Industrial Hygiene Association (AIHA) to pursue a mobile app development project titled “Development of a WBGT-based Heat Stress Assessment Mobile Application” in partnership with East Carolina University (ECU) and Dualboot Partners. The web app is an ECU-owned intellectual property that was developed by Dr. Jo Anne Balanay and Dr. Sinan Sousan, with the support of the ECU Office of Licensing and Commercialization, as a product of their NSF-funded Innovation Corps (i-Corps™) App Development Training in Fall 2020.

PUBLISHED/ ACCEPTED JOURNAL ARTICLES

*Note: Student participation indicated by **

- 63) Edwards R*, Lanier N, **Balanay JG** and Mizelle E (2025). Heat risks in agriculture: Microclimate variability and worker safety in sweet corn and tobacco. *Journal of Occupational and Environmental Hygiene*, 1-8. doi:10.1080/15459624.2025.2473469 (published online 3/21/2025)
- 62) Angol B*, Sousan S and **Balanay JG** (2025). Comparison between WBGT App Prototype and WBGT Monitor to Assess Heat Stress Risk in an Eastern North Carolina Outdoor Setting. *Journal of Occupational and Environmental Hygiene*, 1-14. doi:10.1080/15459624.2024.2444415 (published online 1/08/2025)
- 61) Thomas N*, **Balanay JG**, Shearman S and Richards SL (2024). Public communication and outreach by mosquito programs in the United States. *PLoS Global Public Health* 4(12): e0003804. doi: 10.1371/journal.pgph.0003804

- 60) Bertges N*, Shearman S, Imai S, **Balanay JG** and Sousan S (2024). Examination of Factors that Impact Mask or Respirator Purchase and Usage During the COVID-19 Pandemic. *PLoS ONE* 19(9): e0308841. doi:10.1371/journal.pone.0308841
- 59) Murray JW*, Wu Q, **Balanay JG** and Sousan S (2024). Assessment of PM2.5 Concentration at University Transit Bus Stops Using Low-Cost Aerosol Monitors by Student Commuters. *Sensors* 24(14): 4520. doi:10.3390/s24144520
- 58) Knecht H*, **Balanay JG**, Langley R, Tutor-Marcom R and Richards SL (2024). Retrospective Risk Assessment of Injuries and Fatalities in the Forestry and Logging Workforce in the United States, 2003-2019. *Journal of Agromedicine* 29(3): 372-383. doi:10.1080/1059924X.2024.2325708
- 57) Owusu N*, Sousan S, Richards SL and **Balanay JG** (2024). Occupational Exposure to Solar Ultraviolet Radiation in an Eastern North Carolina University Outdoor Setting during the Four Seasons. *Journal of Occupational and Environmental Hygiene* 21(1): 77-85. doi:10.1080/15459624.2023.2264331
- 56) Knecht H*, **Balanay JG**, Langley R, Tutor-Marcom R and Richards SL (2024). Systematic Review of Biological, Chemical, Ergonomic, Physical, and Psychosocial Hazards Impacting Occupational Health of United States Forestry Workers. *Journal of Forestry* 122(2): 159-170. doi:10.1093/jofore/fvad052
- 55) Fields M*, **Balanay JG**, Byrd B, Kearney G and Richards SL (2023). Retrospective Assessment of Preparedness for Mosquito Control Post-Hurricane Florence in North Carolina. *Disaster Medicine and Public Health Preparedness* 17(e511): 1-5. doi:10.1017/dmp.2023.168
- 54) Chaaban O*, **Balanay JG** and Sousan S (2023). Assessment of Best-Selling Respirators and Masks: Do We Have Acceptable Respiratory Protection for the Next Pandemic? *American Journal of Infection Control* 51: 388-395. doi:10.1016/j.ajic.2022.06.024
- 53) Carvajal P*, **Balanay JG**, Shearman S and Richards SL (2022). Facebook and Mosquito-borne Disease Outbreaks: An Analysis of Public Responses to Federal Health Agencies' Posts about Dengue and Zika in 2016. *PLOS Global Public Health* 2(9): e0000977. doi:10.1371/journal.pgph.0000977
- 52) **Balanay JG**, Mitchell LD and Richards SL (2022). Racial and Gender Disparity among Students and Faculty in EHAC-Accredited Environmental Health Sciences Programs: Trend Analysis from 2009-2021. *Environmental Health Insights* 16: 1-18. doi:10.1177/11786302221112917
- 51) **Balanay JG** and Richards SL (2022). Insights into Diversity in the Environmental Health Science Workforce. *Environmental Health Insights* 16: 1-2. doi:10.1177/11786302221077513
- 50) Vang A*, White AV, **Balanay JG**, Marcom R and Richards SL (2022). Evaluation of Surface versus Total Permethrin Content in Permethrin-Treated Clothing: Implications for Protection Against Mosquitoes. *Pathogens and Global Health* 116(6): 365-375. doi:10.1080/20477724.2022.2028377
- 49) Richards SL, Driver J, Dyer MC, Mather TN, Funkhouser S, Mitchell C, **Balanay JG**, White AV and Meshnick S (2022). Assessing Durability and Safety of Permethrin Impregnated Uniforms Used by Outdoor Workers after One Year of Use. *Journal of Medical Entomology* 59(2): 615-622. doi:10.1093/jme/tjab216
- 48) **Balanay JG** and Oh J (2021). Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges for Toluene. *International Journal of Environmental Research and Public Health* 18(16): 8505. doi:10.3390/ijerph18168505
- 47) Reese K*, Tebehaevu O and **Balanay JG** (2021). Volatile Organic Compound Emission in a University Printing Press Facility in Eastern North Carolina. *Indoor and Built Environment* 30(3): 426-434. doi:10.1177/1420326X19896840
- 46) Dillane D* and **Balanay JG** (2021). Comparison between EPA UV Index App and UV Monitor to Assess Risk for Solar Ultraviolet Radiation Exposure in Agricultural Settings in Eastern North Carolina. *Journal of Occupational and Environmental Hygiene* 18(1): 16-27. doi:10.1080/15459624.2020.1842880
- 45) Sousan S, Garcia N, White A and **Balanay JG** (2021). Filtration Efficiency of Surgical Sterilization Fabric for Respiratory Protection during COVID-19 Pandemic. *American Journal of Infection Control* 49: 1-7. doi:10.1016/j.ajic.2020.11.005
- 44) Stellefson M, Wang M, **Balanay JG**, Wu R and Paige S (2020). Latent Health Risk Classes Associated with Poor Physical and Mental Outcomes in Workers with COPD from Central Appalachian U.S. States. *International Journal of Environmental Research and Public Health* 17(18): 6798. doi:10.3390/ijerph17186798

- 43) Stollefson M, Wang MQ, **Balanay JG** and Wu R (2020). Health Risk Disparities among Employed Adults with COPD living in Central Appalachian U.S. States. *American Journal of Health Education* 51(5): 265-277. doi:10.1080/19325037.2020.1802373
- 42) Dillane D* and **Balanay JG** (2020). Comparison between OSHA-NIOSH Heat Safety Tool app and WBGT monitor to assess heat stress risk in agriculture. *Journal of Occupational and Environmental Hygiene* 17(4): 181-192. doi:10.1080/15459624.2020.1721512
- 41) Xu L and **Balanay JG** (2019). Parent Perceptions of Environmental Triggers for Autism: A Community-Based Pilot Study among Parents of Children with Autism Spectrum Disorders in Rural Settings. *American Journal of Health Studies* 34(2): 93-105. doi:10.47779/ajhs.2019.37
- 40) Dillane D*, Richards SL, **Balanay JG** and Langley R (2019). Risk Assessment and Recommendations for Forester Exposure to Hymenoptera. *Journal of Agromedicine* 24(2): 146-156.
- 39) Bunn JP*, Richards SL and **Balanay JG** (2019). Evaluation of Barrier Sprays for Controlling Mosquitoes in Eastern North Carolina: Can Land Cover and Spatial Analyses Improve Predictions of Efficacy? *Journal of the American Mosquito Control Association* 35(1): 19-31.
- 38) Sullivan KM, Poffley A, Funkhouser S, Driver J, Ross J, Ospina M, Calafat AM, Beard CB, White A, **Balanay JG**, Richards S, Dyer M, Mathers TN and Meshnick S (2019). Bioabsorption and Effectiveness of Long-Lasting Permethrin-Treated Uniforms over Three Months Among North Carolina Outdoor Workers. *Parasites and Vectors* 12:52.
- 37) Knecht H*, Richards S, **Balanay JG** and White A (2018). Impact of Mosquito Age and Insecticide Exposure on Vector Competence of *Aedes albopictus* (Diptera: Culicidae) for Zika Virus. *Pathogens* 7(3): 67.
- 36) Radford CP*, **Balanay JG**, Featherstone A, Kelley T (2018). Elevated Blood Lead Levels in Buncombe County Children: Implications of Lowering the North Carolina Intervention Level to the Centers for Disease Control and Prevention Blood Lead Reference Value. *Journal of Environmental Health* 80(10): 16-22.
- 35) Richards SL, Agada N*, **Balanay JG** and White AV (2018). Permethrin Treated Clothing to Protect Outdoor Workers: Evaluation of Different Methods for Mosquito Exposure Against Populations of Differing Resistance Status. *Pathogen and Global Health* 112(1): 13-21.
- 34) Richards SL, **Balanay JG**, White AV, Hope J, Vandock K, Byrd BD and Reiskind MH (2017). Insecticide Susceptibility Screening against *Culex* and *Aedes* (Diptera: Culicidae) Mosquitoes from the United States. *Journal of Medical Entomology* 55(2): 398-407.
- 33) Dizbay-Onat M*, Vaidya UK, **Balanay JG** and Lungu CL (2017). Preparation and characterization of flax, hemp and sisal fiber derived mesoporous activated carbon adsorbents. *Adsorption Science and Technology* 36(1-2): 441-457.
- 32) Beck N*, **Balanay JG**, Johnson T (2018). Assessment of Occupational Exposure to Heat Stress and Solar Ultraviolet Radiation among Groundskeepers in an Eastern North Carolina University Setting. *Journal of Occupational and Environmental Hygiene* 15(2): 105-116. (Editor's Choice in JOEH Heat Stress Article Collection, August 21, 2019)
- 31) Richards SL, **Balanay JG**, Byrd BD, Reiskind MH and Styers DM (2017). Regional Survey of Mosquito Control Knowledge and Usage in North Carolina. *Journal of the American Mosquito Control Association* 33(4): 331-339.
- 30) Richards SL, Volkan JK*, **Balanay JG** and Vandock K (2017). Evaluation of Bifenthrin and Deltamethrin Barrier Sprays for Mosquito Control in Eastern North Carolina. *Journal of Medical Entomology* 54(6): 1659-1665.
- 29) Kearney GD, **Balanay JG** and Mannarino AJ* (2017). Effectiveness of a Multifaceted Occupational Noise and Hearing Loss Intervention among Landscaping and Groundskeeping Workers. *Journal of Environmental Health* 80(3): 8-15.
- 28) Richards SL, White AV and **Balanay JG** (2017). Potential for sublethal insecticide exposure to impact vector competence of *Aedes albopictus* (Diptera: Culicidae) for dengue and Zika viruses. *Research and Reports in Tropical Medicine* 8: 53-57.
- 27) Richards, SR, **Balanay JG**, Fields M* and Vandock K (2017). Baseline Insecticide Susceptibility Screening against Six Active Ingredients for *Culex* and *Aedes* (Diptera: Culicidae) Mosquitoes in the United States. *Journal of Medical Entomology* 54(3): 682-695.
- 26) Richards SL, **Balanay JG**, Harris J*, Banks V* and Meshnick S (2017). Residual Effectiveness of Permethrin-Treated Clothing for Prevention of Mosquito Bites Under Simulated Conditions. *Journal of Environmental Health* 79(8): 8-15.

- 25) Kearney GD, **Balanay JG** and Mannarino AJ* (2017). Safety Behavior and Work Safety Climate among Landscaping and Groundskeeping Workers: A Pilot Study. *WORK: A Journal of Prevention, Assessment & Rehabilitation* 56(1): 45-53.
- 24) Kearney GD, Allen DL, **Balanay JG** and Barry P (2016). Descriptive Study of Body Pain and Work-related Musculoskeletal Disorders among Latino Farmworkers Working on Sweet Potato Farms in Eastern North Carolina. *Journal of Agromedicine* 21(3): 234-243.
- 23) **Balanay JG**, Kearney GD and Mannarino AJ* (2016). Assessment of occupational noise exposure among groundskeepers in North Carolina public universities. *Environmental Health Insights* 10: 83-92.
- 22) Stott RE*, Richards SL, **Balanay JG** and Martin GL (2016). Prevention of Tick Exposure in Environmental Health Specialists Working in the Piedmont Region of North Carolina. *Journal of Environmental Health* 78(10): E1-E7.
- 21) VanDusen AE*, Richards SL and **Balanay JG** (2016). Evaluation of Bifenthrin Barrier Sprays on Foliage in a Suburban Eastern North Carolina Neighborhood. *Pest Management Science* 72: 1004-1012.
- 20) **Balanay JG**, Kearney GD and Mannarino AJ* (2016). Noise Exposure Assessment among Groundskeepers in a University Setting: A Pilot Study. *Journal of Occupational and Environmental Hygiene* 13(3): 193-202.
- 19) **Balanay JG** and Lungu CT (2016). Determination of Pressure Drop across Activated Carbon Fiber Respirator Cartridges. *Journal of Occupational and Environmental Hygiene* 13(2): 141-147.
- 18) Kearney G, Hu H, Xu X, Hall M and **Balanay JG** (2016). Estimating the Prevalence of Heat-Related Symptoms and Sun Safety Related Behavior among Latino Farmworkers in Eastern North Carolina. *Journal of Agromedicine* 21(1): 15-23.
- 17) Amiotte J*, **Balanay JG** and Humphrey C (2016). Seat Belt Usage Interventions for Motor Vehicle Crash Prevention on the Pine Ridge Indian Reservation, South Dakota. *Journal of Environmental Health* 78(6): 46-52.
- 16) **Balanay JG** and Kearney GD (2015). Attitudes towards Noise, Perceived Hearing Symptoms and Reported Use of Hearing Protection among College Students: Influence of Youth Culture. *Noise and Health* 17(79): 394-405.
- 15) Cockrell W*, **Balanay JG** and Dawkins W (2015). Engineering Control of Noise from 4-Roll Calendar Operations in Tire Manufacturing. *Journal of Occupational and Environmental Hygiene* 12: D193-D200.
- 14) **Balanay JG**, Floyd EL and Lungu CT (2015). Breakthrough Curves for Toluene Adsorption of Different Types of Activated Carbon Fibers: Application in Respiratory Protection. *Annals of Occupational Hygiene* 59(4): 481-490.
- 13) Richards SL, **Balanay JG** and Harris JW* (2015). Effectiveness of Permethrin-Treated Clothing to Prevent Tick Exposure in Foresters in the Central Appalachian Region of the United States. *International Journal of Environmental Health Research* 25(4): 453-462.
- 12) Kearney G, Xu X, **Balanay JG**, Allen DL and Rafferty AP (2015). Assessment of Personal Protective Equipment Use Among Farmers in Eastern North Carolina: A Cross-Sectional Study. *Journal of Agromedicine* 20: 43-54.
- 11) Avery C*, Humphrey C and **Balanay JG** (2014). Evaluation of Five Years of Nursing Home Inspection Forms: Structural and Hygiene-Related Violation Trends. *Journal of Environmental Health* 77(4): 14-18.
- 10) Kearney G, Johnson L, Xu X, **Balanay JG** and Allen DL (2014). Eastern Carolina Asthma Prevention Project (ECAPP): An Environmental Intervention Study Among Rural and Underserved Children with Asthma in Eastern North Carolina. *Environmental Health Insights* 8: 1-11.
- 9) Del Rosario K*, Richards S, Anderson A and **Balanay JG** (2014). Current Status of Mosquito Control Programs in North Carolina: The Need for Cost-Effectiveness Analysis. *Journal of Environmental Health* 76(8): 8-15.
- 8) Kearney G, Xu X, **Balanay JG** and Becker A (2014). Sun Safety Among Farmers and Farmworkers: A Review. *Journal of Agromedicine* 19: 1-13.
- 7) **Balanay JG**, Bartolucci AA and Lungu CT (2014). Adsorption Characteristics of Activated Carbon Fibers (ACFs) for Toluene: Application in Respiratory Protection. *Journal of Occupational and Environmental Hygiene* 11: 133-143.

- 6) **Balanay JG**, Adesina A*, Kearney G and Richards S (2014). Assessment of Occupational Health and Safety Hazard Exposures among Working College Students. *American Journal of Industrial Medicine* 57(1): 114-124.
- 5) Kearney G, Lea S, **Balanay JG**, Wu Q, Bethel J, Von Hollen H, Sheppard K, Tutor-Marcom R and Defazio J (2013). Assessment of Sun Safety Behavior among Farmers Attending a Regional Farm Show in North Carolina. *Journal of Agromedicine* 18 (1): 65-73.
- 4) **Balanay JG** and Lungu CT (2012). Morphologic and Surface Characterization of Different Types of Activated Carbon Fibres. *Adsorption Science and Technology* 30 (4): 355-367.
- 3) **Balanay JG**, Crawford SA and Lungu CT (2011). Comparison of Toluene Adsorption Among Granular Activated Carbon and Different Types of Activated Carbon Fibers (ACFs). *Journal of Occupational and Environmental Hygiene* 8 (10): 573-579.
- 2) Honavar J, Samal AA, Bradley KM, Brandon A, **Balanay JG**, Squadrito GL, Mohankumar K, Maheshwari A, Postlethwait EM, Matalon S and Patel RP (2011). Chlorine Gas Exposure Causes Systemic Endothelial Dysfunction by Inhibiting Endothelial Nitric Oxide Synthase-Dependent Signaling. *American Journal of Respiratory Cell and Molecular Biology* 45 (2): 419-425.
- 1) **Balanay JG** and Lungu CT (2009). Exposure of Jeepney Drivers in Manila, Philippines to Selected Volatile Organic Compounds (VOCs). *Industrial Health* 47 (1): 33-42.

PUBLISHED BOOK CHAPTER

- 3) Adewumi-Gunn T, **Balanay JG**, Daffer M, Hemperly S, Jacklitsch B, Larranaga M, Lenling M, Lucha G, Old L and Vietas J (2023). Technical Framework: Climate Change Adaptation for the OEHS Professional. American Industrial Hygiene Association (AIHA) Press, August 16, 2023.
- 2) **Balanay JG** (2018). Noise and the Environment (Chapter 24). In P Knechtges, GD Kearney and B Resnick (Eds.), *Environmental Public Health: The Practitioner's Guide* (pp. 647-684). Washington, DC: APHA Press. (ISBN 978-0-87553-293-6)
- 1) **Balanay JG** (2017). Application of Activated Carbon Fibers in Respiratory Protection for Volatile Organic Compounds (Chapter 15). In DP Yamamoto, RM Eninger and L Racz (Eds.), *Handbook of Respiratory Protection: Safeguarding against Current and Emerging Hazards* (pp. 293-331). Boca Raton, FL: CRC Press. (ISBN 9781498781145)

PUBLISHED/ ACCEPTED ABSTRACTS

Note: Student participation indicated by *

- 19) Curtis S, White A, Pokhrel L and **Balanay JG** (2025). *Assessing Occupational Noise Exposures during National Hockey League Games*. AIHA Connect 2025, Kansas City, MO, May 19-21, 2025.
- 18) **Balanay JG** and Angol B (2024). *Comparison between WBGT app prototype and WBGT monitor to assess heat stress risk in groundskeeping in an Eastern North Carolina university setting*. AIHA Connect 2024, Columbus, OH, May 21, 2024.
- 17) **Balanay JG** and Dillane D (2021). *Comparison between OSHA-NIOSH Heat Safety Tool App and WBGT Monitor to Assess Heat Stress Risk in Agriculture*. American Industrial Hygiene Conference and Exposition (AIHce), Virtual, May 25, 2021.
- 16) **Balanay JG** (2021). *Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges for Toluene*. American Industrial Hygiene Conference and Exposition (AIHce), Virtual, May 25, 2021.
- 15) **Balanay JG** (2020). *Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges for Toluene*. American Industrial Hygiene Conference and Exposition (AIHce), Atlanta, GA, June 1-3, 2020. (Abstract accepted but presentation cancelled due to COVID-19 pandemic)
- 14) **Balanay JG**, Beck N* and Johnson T (2019). *Assessment of Occupational Exposure to Heat Stress and Solar Ultraviolet Radiation among Groundskeepers in an Eastern North Carolina University Setting*. American Industrial Hygiene Conference and Exposition (AIHce), Minneapolis, MN, May 22, 2019.

- 13) **Balanay JG**, Kearney GD and Mannarino AJ* (2017). *Assessment of Occupational Noise Exposure among Groundskeepers in North Carolina Public Universities*. American Industrial Hygiene Conference and Exposition (AIHce), Seattle, WA, June 7, 2017.
- 12) **Balanay JG** and Xu L (2016). *Parents' Perceptions on Environmental Triggers and Autism: A Community-based Pilot Study among Parents of Children with Autism Spectrum Disorders in Rural Settings*. American Public Health Association (APHA) Annual Meeting and Public Health Expo 2016, Denver, CO, October – November 2016.
- 11) **Balanay JG** and Lungu C (2015). *Determination of Pressure Drop Across Activated Carbon Fiber Respirator Cartridges*. American Industrial Hygiene Conference and Exposition (AIHce) 2015, Salt Lake City, Utah, June 2015.
- 10) **Balanay JG**, Adesina A*, Kearney G and Richards S (2014). *Assessment of Occupational Health and Safety Hazard Exposures among Working College Students*. American Industrial Hygiene Conference and Exposition (AIHce) 2014, San Antonio, Texas, June 2014.
- 9) Kearney G, Lea S, **Balanay JG**, Wu Q, Bethel J, Von Hollen H, Sheppard K, Tutor-Marcom R and Defazio J (2013). *An Assessment of Perceptions and Practices on Sun Protection Among Farmers Attending a Regional Farm Show in North Carolina*. American Industrial Hygiene Conference and Exposition (AIHce) 2013, Montreal, Canada, May 2013.
- 8) **Balanay JG** and Lungu C (2013). *Breakthrough Curves for Toluene Adsorption on Different Types of Activated Carbon Fibers: Application on Respiratory Protection*. American Industrial Hygiene Conference and Exposition (AIHce) 2013, Montreal, Canada, May 2013.
- 7) Hemphill C, **Balanay JG**, Lungu C and Oestenstad K (2011). *Characterization of Activated Carbon Fiber Cloth and Felt*. American Industrial Hygiene Conference and Exposition (AIHce) 2011, Portland, Oregon, May 2011.
- 6) **Balanay JG**, Bartolucci A and Lungu C (2011). *Adsorption Characteristics of Activated Carbon Fibers for Toluene: Application on Respiratory Protection*. American Industrial Hygiene Conference and Exposition (AIHce) 2011, Portland, Oregon, May 2011.
- 5) Samal AA, Honavar J, **Balanay JG**, Squadrito GL, Fanucchi M, Postlethwait E, Matalon S and Patel RP (2010). Post-Cl₂ Exposure Therapeutics Using Nitrite: Different Effects of IM vs. IP Administration. *Free Radical Biology & Medicine* 49: S196.
- 4) Patel RP, Yadav A, Samal A, Anjum N, Vedagiri K, Honavar J, Brandon A, **Balanay JG**, Doran S, Squadrito G, Fanucchi M, Postlethwait E and Matalon S (2010). Sodium Nitrite Therapy Attenuates Lung Injury Post Chlorine Exposure: Impact of Administration Modality. *Nitric Oxide: Biology and Chemistry* 22: S13.
- 3) **Balanay JG**, Crawford SA and Lungu CT (2010). *Adsorption Characteristics of Various Types of Activated Carbon Fibers (ACFs) for Toluene*. American Industrial Hygiene Conference and Exposition (AIHce) 2010, Denver, Colorado, May 2010.
- 2) Samal AA, Yadav AK, Anjum N, Vedagiri K, Honavar J, Brandon AP, **Balanay JG**, Squadrito GL, Fanucchi MV, Postlethwait EM, Matalon S and Patel RP (2009). Sodium Nitrite Administration Mitigates Lung Injury After Chlorine Gas Exposure in Rats. *Free Radical Biology & Medicine* 47: S104.
- 1) **Balanay JG** and Lungu C (2009). *Toluene Adsorption on Various Types of Activated Carbon Fibers*. American Industrial Hygiene Conference and Exposition (AIHce) 2009, Toronto, Canada, June 2009.

RESEARCH REPORT

Note: Student participation indicated by *

- 12) White A, Richards S and **Balanay JG** (2024). *Survey Results of Occupational Hazards Among Mosquito Control Personnel in North Carolina and Virginia*. Submitted final research report to the Central Appalachian Regional Education Research Center (CARERC), August 23, 2024.
- 11) Angol B* and **Balanay JG** (2024). *Comparison between WBGT App Prototype and WBGT Monitor to Assess Heat Stress Risk*. Submitted final research report to the Deep South Center for Occupational Health and Safety, August 12, 2024.
- 10) Richards S, **Balanay J** and Knecht H* (2021). *Risk Assessment of Forestry: Fatalities and Injuries in the United States (2005-2020)*. Submitted final research report to the Central Appalachian Regional Education Research Center (CARERC), June 30, 2021.

- 9) Sousan S, White A and **Balanay JG** (2020). *Filter Efficiency of H600 Dual Layer Sterilization Wrap*. Submitted final report to ECU Faculty Collaborators, April 23, 2020.
- 8) **Balanay JG** and Carter D* (2019). Final Summary Report: Reliability of Mobile Apps as Alternative Exposure Assessment Methods for Heat Stress and Solar Ultraviolet Radiation in Agricultural Settings in Eastern North Carolina. Submitted research report to the Southeast Center for Agricultural Health and Injury Prevention (SCAHIP), University of Kentucky, November 4, 2019.
- 7) Richards SL, Bunn J*, **Balanay JG**, Hope J, and Vandock K (2016). Evaluation of Bifenthrin and Deltamethrin Barrier Sprays for Mosquito Control in Eastern North Carolina: Final Report to Bayer Crop Science. Submitted research report to Bayer Crop Science, December 2016.
- 6) Richards SL, **Balanay JG**, White A, Hope J, and Vandock K (2016). Insecticide Susceptibility Screening Against Six Active Ingredients for Culex and Aedes (Diptera: Culicidae) Mosquitoes in the United States: Final Report to Bayer Crop Science. Submitted research report to Bayer Crop Science, December 2016.
- 5) **Balanay JG** and Xu L (2015). Research Report: Knowledge and Perceptions on Environmental Triggers and Related Educational Needs among Parents of Children with Autism Spectrum Disorder. Submitted to the ECU Center for Sustainability, August 26, 2015.
- 4) Kearney G, **Balanay JG** and Mannarino A* (2015). Report on the Noise Exposure Assessment among Groundskeepers at University of North Carolina at Wilmington (UNCW). Submitted final research report to David Todd (UNCW Office of Environmental Health and Safety) and Christopher Randall (UNCW Facilities Office), August 12, 2015.
- 3) Kearney G, **Balanay JG** and Mannarino A* (2015). Report on the Noise Exposure Assessment among Groundskeepers at North Carolina State University (NCSU). Submitted final research report to Sarah Ketchem and Jeff del Pinal (NCSU Facilities Office), August 12, 2015.
- 2) Kearney G, **Balanay JG** and Mannarino A* (2015). Report on the Noise Exposure Assessment among East Carolina University Groundskeepers. Submitted final research report to Phil Lewis (ECU Office of Environmental Health and Safety) and John Gill (ECU Facilities Services), May 18, 2015.
- 1) Richards S and **Balanay JG** (2013). Effectiveness of Insecticide-treated Clothing to Prevent Tick and Mosquito Exposure in Foresters. Submitted to the Central Appalachian Regional Education Research Center (CARERC), September 18, 2013.

CONFERENCE PRESENTATIONS

Note: Student participation indicated by *

International

- 29) **Balanay JG** and Angol B (2024). *Comparison between WBGT app prototype and WBGT monitor to assess heat stress risk in groundskeeping in an Eastern North Carolina university setting*. AIHA Connect 2024, Columbus, OH, May 21, 2024.
- 28) **Balanay JG** and Dillane D (2023). *Comparison between EPA UV Index App and UV Monitor to Assess Risk for Solar Ultraviolet Radiation Exposure in in Agricultural Settings in Eastern North Carolina*. 31st Annual Joint Safety and Environmental Professional Development Symposium (Webinar), April 20, 2023.
- 27) Sousan S and **Balanay JG** (2022). *Mobile App to Assess Risk WBGT-Heat Stress Risk of Outdoor Workers*. 2021 International Society for Agricultural Safety and Health (ISASH) Conference, Fort Collins, CO, June 2022.
- 26) **Balanay JG** and Dillane D (2022). *Comparison between EPA UV Index App and UV Monitor to Assess Risk for Solar Ultraviolet Radiation Exposure in in Agricultural Settings in Eastern North Carolina*. American Industrial Hygiene Conference and Exposition (AIHce), Nashville, TN, May 24, 2022.
- 25) **Balanay JG** and Dillane D (2021). *Comparison between OSHA-NIOSH Heat Safety Tool App and WBGT Monitor to Assess Heat Stress Risk in Agriculture*. 2021 International Society for Agricultural Safety and Health (ISASH) Conference, Virtual, June 24, 2021.
- 24) **Balanay JG** and Dillane D (2021). *Comparison between OSHA-NIOSH Heat Safety Tool App and WBGT Monitor to Assess Heat Stress Risk in Agriculture*. American Industrial Hygiene Conference and Exposition (AIHce), Virtual, May 25, 2021.

- 23) **Balanay JG** (2021). *Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges for Toluene*. American Industrial Hygiene Conference and Exposition (AIHce), Virtual, May 25, 2021.
- 22) **Balanay JG** (2021). *Comparison between OSHA-NIOSH Heat Safety Tool App and WBGT Monitor to Assess Heat Stress Risk in Agricultural Settings in Eastern North Carolina*. 29th Annual Joint Safety and Environmental Professional Development Symposium (Webinar), April 22, 2021.
- 21) **Balanay JG** (2020). *Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges for Toluene*. American Industrial Hygiene Conference and Exposition (AIHce), Atlanta, GA, June 3, 2020 (*accepted but cancelled due to COVID-19 pandemic*).
- 20) **Balanay JG**, Beck N* and Johnson T (2019). *Assessment of Occupational Exposure to Heat Stress and Solar Ultraviolet Radiation among Groundskeepers in an Eastern North Carolina University Setting*. American Industrial Hygiene Conference and Exposition (AIHce) 2019, Minneapolis, MN, May 22, 2019.
- 19) Carter D*, Richards SL and **Balanay JG** (2019). *Risk Assessment and Recommendations for Forester Exposure to Hymenoptera*. American Industrial Hygiene Conference and Exposition (AIHce) 2019, Minneapolis, MN, May 20, 2019.
- 18) **Balanay JG** (2018). *Assessment of Occupational Exposure to Heat Stress and Solar Ultraviolet Radiation among Groundskeepers in an Eastern North Carolina University Setting*. 26th Annual Joint Safety and Environmental Professional Development Symposium (Webinar), April 24, 2018.
- 17) **Balanay JG**, Kearney GD and Mannarino AJ* (2017). *Assessment of Occupational Noise Exposure among Groundskeepers in North Carolina Public Universities*. American Industrial Hygiene Conference and Exposition (AIHce) 2017, Seattle, WA, June 2017.
- 16) **Balanay JG** (2016). *Application of Activated Carbon Fibers in Respiratory Protection for Volatile Organic Compounds*. 24th Annual Joint Safety and Environmental Professional Development Symposium (Webinar), March 17, 2016.
- 15) **Balanay JG**, Xu L, Lin-Sun L* and Clawson K* (2015). *Knowledge and Perception on Environmental Triggers and Related Educational Needs among Parents of Children with Autism Spectrum Disorders*. Regional Asia Pacific IMFAR: Shanghai 2015, Shanghai, China, November 6-8, 2015.
- 14) **Balanay JG** and Lungu C (2015). *Determination of Pressure Drop across Activated Carbon Fiber Respirator Cartridges*. American Industrial Hygiene Conference and Exposition (AIHce) 2015, Salt Lake City, Utah, June 2015.
- 13) **Balanay JG**, Adesina A*, Kearney G and Richards S (2014). *Assessment of Occupational Health and Safety Hazard Exposures among Working College Students*. American Industrial Hygiene Conference and Exposition (AIHce) 2014, San Antonio, Texas, June 2014.
- 12) Kearney G, Allen DL, Hurtado G and **Balanay JG** (2014). *Slicing the Sweet Potato Pie: An Evaluation of Work-Related Musculoskeletal Disorders (WMSDs) and Pain among Latino Farmworkers*. 2014 International Society for Agricultural Safety and Health (ISASH) Conference, Omaha, Nebraska, June 2014.
- 11) **Balanay JG** and Lungu C (2013). *Breakthrough Curves for Toluene Adsorption on Different Types of Activated Carbon Fibers: Application on Respiratory Protection*. American Industrial Hygiene Conference and Exposition (AIHce) 2013, Montreal, Canada, May 2013.
- 10) Kearney G, Lea S, **Balanay JG**, Wu Q, Bethel J, Von Hollen H, Sheppard K, Tutor-Marcom R and Defazio J (2013). *An Assessment of Perceptions and Practices on Sun Protection Among Farmers Attending a Regional Farm Show in North Carolina*. American Industrial Hygiene Conference and Exposition (AIHce) 2013, Montreal, Canada, May 2013.
- 9) **Balanay JG** (2012). *Chemical Agents and Industrial Hygiene Instrumentation*. 2nd International Postgraduate Course in Occupational Health and Safety, University of the Philippines Manila, Manila, Philippines, October 2012.
- 8) **Balanay JG**, Bartolucci A and Lungu C (2011). *Adsorption Characteristics of Activated Carbon Fibers for Toluene: Application on Respiratory Protection*. American Industrial Hygiene Conference and Exposition (AIHce) 2011, Portland, Oregon, May 2011.
- 7) Hemphill C, **Balanay JG**, Lungu C and Oestenstad K (2011). *Characterization of Activated Carbon Fiber Cloth and Felt*. American Industrial Hygiene Conference and Exposition (AIHce) 2011, Portland, Oregon, May 2011.
- 6) **Balanay JG**, Crawford SA and Lungu CT (2010). *Testing Activated Carbon Fibers for Respiratory Protection Use*. 8th International Scientific Conference of the International Occupational Hygiene Association, Roma, Italy, September 2010.

- 5) **Balanay JG**, Crawford SA and Lungu CT (2010). *Adsorption Characteristics of Various Types of Activated Carbon Fibers (ACFs) for Toluene*. American Industrial Hygiene Conference and Exposition (AIHce) 2010, Denver, Colorado, May 2010.
- 4) **Balanay JG** and Lungu C (2009). *Toluene Adsorption on Various Types of Activated Carbon Fibers*. American Industrial Hygiene Conference and Exposition (AIHce) 2009, Toronto, Canada, June 2009.
- 3) Wade L, **Balanay JG** and Lungu C (2009). *Physisorption as a Method to Determine Surface Area and Porosity of PPE Materials*. American Industrial Hygiene Conference and Exposition (AIHce) 2009, Toronto, Canada, June 2009.
- 2) **Balanay JG**, Crawford S and Lungu C (2008). *Comparison of Adsorption Characteristics between Granular Activated Carbon (GAC) and Activated Carbon Fibers (ACFs) for Toluene*. American Industrial Hygiene Conference and Exposition (AIHce) 2008, St. Paul, Minnesota, June 2008.
- 1) **Goot, JB** and Streifel Andrew J (2002). *Indoor Air Quality Management During Construction Relocation of a Bone Marrow Transplant Unit*. American Industrial Hygiene Conference and Exposition (AIHce) 2002, San Diego, California, June 2002.

National

- 22) Murray JW*, **Balanay JG** and Sousan S (2023). *Student Assessment of PM2.5 Concentration of ECU Transit Bus Stops Using a Low-Cost Aerosol Monitor*. American Association for Aerosol Research (AAAR) 41st Annual Conference, Portland, OR, October 2023.
- 21) Reese K*, **Balanay JG** and Tebehaevu O (2018). *Volatile Organic Compound (VOC) Emission in a University Printing Press Facility in Eastern North Carolina*. National Environmental Health Association's Annual Educational Conference and Exhibition (NEHA AEC), Anaheim, CA, June 2018.
- 20) Richards SL, **Balanay JG**, Vandock K, and J Hope (2017). *Mosquito susceptibility screening against six active ingredients for Culex and Aedes populations in the United States*. 83rd AMCA (American Mosquito Control Association) Annual Meeting, San Diego, CA, February 13-17, 2017.
- 19) **Balanay JG**, Xu L, Sun L*, Clawson K*, and Roy S (2016). *Parents' Perceptions on Environmental Triggers and Autism: A Community-based Pilot Study among Parents of Children with Autism Spectrum Disorders in Rural Settings*. American Public Health Association (APHA) 2016 Annual Meeting & Expo, Denver, CO, October 29 - November 2, 2016.
- 18) Richards SL, **Balanay JG**, Fields M*, and Vandock K (2016). *Nationwide mosquito susceptibility against six active ingredients*. National Environmental Health Association (NEHA), Enhancing Environmental Health Knowledge (EEK): Vectors and Public Health Pests Virtual Conference, April 13-14, 2016.
- 17) Volkan J*, Richards SL, and **Balanay JG** (2016). *Evaluation of barrier sprays for mosquito control in eastern North Carolina*. National Environmental Health Association (NEHA), Enhancing Environmental Health Knowledge (EEK): Vectors and Public Health Pests Virtual Conference, April 13-14, 2016.
- 16) Richards SL, **Balanay JG**, Harris J, Banks V*, and Meshnick S (2016). *Duration of effectiveness of permethrin-treated clothing for prevention of mosquito bites under simulated conditions*. National Environmental Health Association (NEHA), Enhancing Environmental Health Knowledge (EEK): Vectors and Public Health Pests Virtual Conference, April 13-14, 2016.
- 15) Richards S, **Balanay JG**, Fields M* and Vandock K (2016). *Nationwide mosquito susceptibility screening against six active ingredients*. 82nd AMCA (American Mosquito Control Association) Annual Meeting, Savannah, GA, February 7 – 11, 2016.
- 14) Mannarino A*, **Balanay JG** and Kearney GD (2015). *Noise Exposure Assessment among Groundskeepers: A Pilot Study*. National Environmental Health Association's Annual Educational Conference and Exhibition, Orlando, FL, July 14, 2015.
- 13) Richards SL, **Balanay JG**, Harris JW, Banks VM* and Meshnick S (2015). *Duration of Effectiveness of Permethrin-Treated Clothing to Prevent Mosquito Bites under Simulated Conditions*. American Mosquito Control Association (AMCA) 81st Annual Meeting, New Orleans, LA, March 29 – April 2, 2015.
- 12) Kearney G, Johnson L, Xu X, Lamm K, **Balanay JG** and Allen L (2014). *Eastern Carolina Asthma Prevention Project (ECAPP): An Environmental Intervention Project Among Rural and Underserved Children with Asthma in Eastern North Carolina*. 2014 U.S. Public Health Service Scientific and Training Symposium, Raleigh, North Carolina, June 2014.

- 11) Dizbay-Onat M*, Vaidya U, **Balanay JG** and Lungu C (2011). *Carbon Capture with Natural Fiber-Based Activated Carbons*. Global Plastics Environmental Conference (GPEC) 2011, Atlanta, Georgia, October 2011.
- 10) Samal AA, Honavar J, **Balanay JG**, Squadrito GL, Fanucchi M, Postlethwait E, Matalon S and Patel RP (2010). *Post-Cl₂ Exposure Therapeutics Using Nitrite: Different Effects of IM vs. IP Administration*. Free Radical Biology and Medicine, 17th Annual Meeting of the Society for Free Radical Biology and Medicine, Orlando, Florida, November 2010.
- 9) Samal A, Yadav A, Honavar J, **Balanay JG**, Squadrito GL, Postlethwait E, Matalon S and Patel RP (2010). *Post-Cl₂ Exposure Therapeutics Using Nitrite: Different Effects of IM vs. IP Administration*. Annual CounterACT Network Research Symposium, San Francisco, California, June 2010.
- 8) Yadav AK, Samal AA, Anjum N, Vedagiri K, Honavar J, Brandon AP, **Balanay JG**, Squadrito GL, Fanucchi MV, Postlethwait EM, Matalon S and Patel RP (2010). *Sodium Nitrite Therapy Mitigates Lung Injury After Chlorine Gas Exposure in Rats*. American Thoracic Society International Conference, New Orleans, Louisiana, May 2010.
- 7) Samal A, Yadav A, Anjum N, Vedagiri K, Honavar J, Brandon A, **Balanay JG**, Squadrito GL, Fanucchi M, Postlethwait E, Matalon S and Patel RP (2009). *Sodium Nitrite Administration Mitigates Lung Injury After Chlorine Gas Exposure in Rats*. 16th Annual Meeting of the Society for Free Radical Biology and Medicine, San Francisco, California, November 2009.
- 6) **Balanay JG** (2005). Session speaker and course coordinator, 1st Short Course in Industrial Hygiene, College of Public Health, University of the Philippines Manila, Philippines, March 2005.
- 5) **Balanay JG** (2004). *Assessment of Volatile Organic Compounds (VOCs) Exposure Among Jeepney Drivers in Manila, Philippines*. 9th National Occupational Safety and Health (NOSH) Congress, Occupational Safety and Health Center (OSHC), Quezon City, Philippines, October 2004.
- 4) **Balanay JG** (2004). Panel Reactor, "Research Presentation of Lead Toxicity in Children", Manila, Philippines, August 2004.
- 3) **Balanay JG** (2004 – 2005). *Industrial Hygiene*. Postgraduate Course in Occupational Health and Safety, College of Public Health, University of the Philippines Manila.
- 2) **Balanay JG** (2003). *Assessment of Volatile Organic Compounds (VOCs) Exposure Among Jeepney Drivers in Manila, Philippines*. Industrial Hygiene Association of the Philippines (IHAP) First National Annual Convention and Foundation Anniversary, Manila, Philippines, December 2003.
- 1) **Balanay JG** (2003). *Principles of Ergonomics*. Industrial Hygiene Association of the Philippines (IHAP) First Scientific Meeting, Manila, Philippines, September 2003.

Regional

- 31) **Balanay JG** and Angol Bridget (2025). *Comparison between WBGT App Prototype and WBGT Monitor to Assess Heat Stress Risk*. [Podium presentation]. Southeast Regional Research Symposium (SERRS) 2025, San Juan, Puerto Rico, March 6, 2025.
- 30) Lanier N, Edwards N, **Balanay JG**, Smith DJ and Mizelle E (2024). *Farmworker Heat Stress Risk Within Corn and Tobacco Crop Rows*. [Podium/panel presentation]. Southern Nursing Research Society Annual Conference, Charlotte, NC, February 21-23, 2024.
- 29) **Balanay JG** (2023). *Racial and Gender Diversity among Students and Faculty in EHAC-Accredited Environmental Health Sciences Programs: Trend Analysis from 2009-2021*. Women in Public Health Seminar Series on Diversity, Office of Diversity, Equity and Inclusion (DEI), School of Public Health, University of Alabama at Birmingham (Virtual), March 17, 2023.
- 28) **Balanay JG** (2022). *Comparison between OSHA-NIOSH Heat Safety Tool App and WBGT Monitor to Assess Heat Stress Risk in Agriculture*. Southeastern Environmental Health District (SEEHD) 3rd Quarter Regional Meeting (Virtual), August 25, 2022.
- 27) **Balanay JG** (2022). *Comparison between OSHA-NIOSH Heat Safety Tool App and WBGT Monitor to Assess Heat Stress Risk in Agriculture*. North Central Environmental Health District (NCEHD) 1st Quarter Regional Meeting (Virtual), March 24, 2022.
- 26) **Balanay JG** (2022). *Comparison between OSHA-NIOSH Heat Safety Tool App and WBGT Monitor to Assess Heat Stress Risk in Agriculture*. American Industrial Hygiene Association (AIHA) Carolinas Spring Conference, Raleigh, NC, March 18, 2022.
- 25) **Balanay JG** and Sousan S (2021). *Mobile App to Assess WBGT-Heat Stress Risk of Outdoor Workers*. Innovation and Entrepreneurship Showcase, 15th Annual Research and Creative

Achievement Week (Virtual), April 3-9, 2021. Presentation video accessed via YouTube: original presentation (<https://youtu.be/4ZkAiDgm-kA>) and Idea 2 Impact featured presentation (<https://youtu.be/eLLvzqva3S0>)

- 24) **Balanay JG** and Dillane D* (2021). *Comparison between OSHA-NIOSH Heat Safety Tool App and WBGT Monitor to Assess Heat Stress Risk in Agriculture*. 5th Annual Fort Benning Heat Forum (Virtual), February 23, 2021.
- 23) Fields M*, **Balanay JG**, Kearney GD, Byrd B and Richards SL (2020). *Retrospective Assessment of Preparedness for Mosquito Control Post-Hurricane Florence in North Carolina*. 2020 Hurricon, Greenville, NC, February 27-28, 2020.
- 22) Carter D*, Richards SL, **Balanay JG** and Langley R (2019). *Risk Assessment and Recommendations for Forester Exposure to Hymenoptera*. North Carolina Agricultural Health and Safety Symposium, Research Triangle Park, NC, March 27, 2019.
- 21) **Balanay JG** (2019). *Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges for Toluene*. American Industrial Hygiene Association (AIHA) Carolinas Spring Conference, Concord, NC, March 8, 2019.
- 20) Reese K*, **Balanay JG** and Tebehaevu O (2018). *Volatile Organic Compound (VOC) Emission in a University Printing Press Facility in Eastern North Carolina*. American Industrial Hygiene Association (AIHA) Carolinas Spring Conference, Durham, NC, March 8, 2018.
- 19) Beck N* and **Balanay JG** (2017). *Exposure to Heat Stress, Solar Ultraviolet Radiation and Other Occupational Health Hazards among Groundskeepers at East Carolina University*. Annual Deep South Center for Occupational Health and Safety Research Symposium, Opelika, Alabama, March 31, 2017.
- 18) Richards SL, **Balanay JG**, Vandock K, Hope J (2017). *Mosquito susceptibility screening against six active ingredients for Culex and Aedes populations in the United States*. 42nd Mid-Atlantic Mosquito Control Association Conference, Newport News, VA, January 31 – February 2, 2017.
- 17) Bunn J*, Richards SL, and **Balanay JG** (2016). *Efficacy of barrier sprays in eastern North Carolina*. 51st Annual North Carolina Mosquito and Vector Control Association, Carolina Beach, NC, November 14-16, 2016.
- 16) Richards SL, Byrd BD, Reiskind MH, and **Balanay JG** (2016). *Regional survey of mosquito control and usage in North Carolina*. 51st Annual North Carolina Mosquito and Vector Control Association, Carolina Beach, NC, November 2016.
- 15) **Balanay JG** and Kearney G (2016). *Attitudes toward Noise, Perceived Hearing Symptoms, and Reported Use of Hearing Protection among College Students: Influence of Youth Culture*. 2016 North Carolina Public Health Association (NCPHA) Fall Educational Conference, New Bern, NC, September 15, 2016.
- 14) **Balanay JG** and Kearney G (2016). *Attitudes toward Noise, Perceived Hearing Symptoms, and Reported Use of Hearing Protection among College Students: Influence of Youth Culture*. North Carolina Acoustical Society of America (NC ASA) 50th Anniversary Meeting, Durham, NC, May 6, 2016.
- 13) Richards S, **Balanay JG**, Fields M* and Vandock K (2016). *Nationwide mosquito susceptibility screening against six active ingredients*. 41st Mid-Atlantic Mosquito Control Association Conference, Nashville, TN, March 2016.
- 12) Kearney G and **Balanay JG** (2015). *Results of Noise Exposure Assessments among Grounds Maintenance Workers at Multiple Universities in NC*. NC OSHERC NORA Interdisciplinary Seminar Series, University of North Carolina – Chapel Hill, November 4, 2015.
- 11) Mannarino A*, **Balanay JG** and Kearney GD (2015). *Noise Exposure Assessment among Groundskeepers: A Pilot Study*. American Industrial Hygiene Association (AIHA) Carolinas Spring Conference, Charlotte, NC, March 19, 2015.
- 10) Richards SL, **Balanay JG**, Harris JW, Banks VA* and Meshnick S (2014). *Environmental Impacts on Effectiveness of Permethrin-Treated Clothing Used by Foresters to Prevent Mosquito Bites*. North Carolina Public Health Association (NCPHA) Fall Conference 2014, Wilmington, North Carolina, September 2014.
- 9) **Balanay JG**, Adesina A*, Kearney G and Richards S (2013). *Assessment of Occupational Health and Safety Hazard Exposure among Working College Students*. NC Society for Public Health Education (SOPHE) Annual Meeting, Greenville, North Carolina, October 9, 2013.

- 8) **Balanay JG** (2012-2014). Use of Personal Protective Equipment (PPE) when OSHA and Worker Protection Standard Applies. Agricultural Medicine Course: Occupational and Environmental Health for Rural Health Professionals, Greenville, North Carolina, April 2012/ April 2013/ March 2014.
- 7) **Balanay JG**, Crawford SA and Lungu CT (2011). *Adsorption Characteristics of Various Types of Activated Carbon Fibers (ACFs) for Toluene*. 1st Faculty Affiliates Symposium and Luncheon, North Carolina Agromedicine Institute, September 2011.
- 6) **Balanay JG** (2011). *Can Activated Carbon Fibers Replace Chemical Cartridges in Respirators in the Future?* Deep South Center for Occupational Health and Safety Research Symposium, Opelika, Alabama, April 2011.
- 5) **Balanay JG** and Lungu C (2010). *Adsorption Characteristics of Various Types of Activated Carbon Fibers for Toluene*. 2nd Public Health Research Day (PHRD) 2010, University of Alabama at Birmingham, Birmingham, Alabama, April 2010.
- 4) **Balanay JG** and Lungu C (2009). *Toluene Adsorption on Activated Carbon Fibers*. 1st Public Health Research Day (PHRD) 2009, University of Alabama at Birmingham, Birmingham, Alabama, April 2009.
- 3) **Balanay JG** (2009). *Toluene Adsorption on Activated Carbon Fibers: Implications for Respiratory Protection*. Graduate Student Research Day 2009, Graduate School, University of Alabama at Birmingham, Birmingham, Alabama, February 2009.
- 2) **Balanay JG** (2008). *Emerging Issues in Environmental and Occupational Safety and Health*. Occupational and Environmental Safety and Health Institute, Birmingham, Alabama, June 2008.
- 1) **Balanay JG** (2008). *Comparing the Adsorption Characteristics between Granular Activated Carbon (GAC) and Activated Carbon Fiber (ACF) for Respiratory Protection Application*. Essential Elements in Worker Protection Seminar and Annual Alabama AIHA Student Research Presentations, Birmingham, Alabama, May 2008.

RESEARCH GRANTS AND CONTRACTS

Awarded

- 22) Mizelle E, Thompson L, Larson KL, Melendez Roman CR and **Balanay JG** (2023). Backpack Hydration System Use among Farmworkers. K01 Mentored Research Scientist Development Award, National Institute for Occupational Safety and Health (NIOSH) (\$378,138.00).
- 21) Sousan, S, Mizelle E and **Balanay J** (2024). Pilot Study: Estimating core body temperature using physiological and environmental factors. Center for Human Health and the Environment, North Carolina State University (\$15,000).
- 20) **Balanay JG** and Sousan S (2023). Development of a WBGT-based Heat Stress Assessment Mobile Application. AIHA Request for Proposal – Heat Stress Mobile App, American Industrial Hygiene Association (\$26,834.00).
- 19) White AV, **Balanay JG** and Richards SL (2023). Survey of Occupational Hazards among Vector Control Personnel. Central Appalachian Regional Education and Research Center (CARERC), National Institute for Occupational Safety and Health (NIOSH) (\$14,994.00).
- 18) Angol BA and **Balanay JG** (2023). Comparison between WBGT App Prototype and WBGT Monitor to Assess Heat Stress Risk in Groundskeeping in an Eastern North Carolina University Setting. NIOSH Pilot/Small Research Training Grant, Deep South Center for Occupational Safety and Health, National Institute for Occupational Safety and Health (NIOSH) (\$9,999.00).
- 17) Richards S, **Balanay JG** and Knecht H (2020). Risk Assessment of Forester Injuries Reported to the Worker Compensation Program in North Carolina. Central Appalachian Regional Education and Research Center (CARERC), National Institute for Occupational Safety and Health (NIOSH) (\$14,984).
- 16) Stellefson M, **Balanay JG**, Gudivada V and Wu R (2019). Occupational and Environmental Risk Factors Associated with Poor Health-Related Quality of Life in Central Appalachian Workers with Chronic Obstructive Pulmonary Disease (COPD). Central Appalachian Regional Education and Research Center (CARERC), National Institute for Occupational Safety and Health (NIOSH) (\$15,000).

- 15) **Balanay JG** and Carter DD (2018). Reliability of Mobile Apps as Alternative Exposure Assessment Methods for Heat Stress and Solar Ultraviolet Radiation in Agricultural Settings in Eastern North Carolina. Southeast Center for Agricultural Health and Injury Prevention (SCAHIP), Pilot Studies Program, National Institute for Occupational Safety and Health (NIOSH) (\$11,999.00).
- 14) **Balanay JG** (2017). Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges for Volatile Organic Compounds. NC Occupational Safety and Health Education and Research Center – Pilot Project Awards, National Institute for Occupational Safety and Health (NIOSH) (\$7,317.00).
- 13) Richards R and **Balanay JG** (2016). Nationwide Mosquito Susceptibility Screening. Bayer Crop Science (\$20,000.00).
- 12) Richards R and **Balanay JG** (2016). Barrier Spray Efficacy. Bayer Crop Science (\$30,000.00).
- 11) Richards R, **Balanay JG**, Byrd B, Reiskind M and Styers D (2015-2016). Regional Survey of Mosquito Control Knowledge and Usage in North Carolina. Pesticide Environmental Trust Fund (PETF), North Carolina Department of Agriculture and Consumer Services (\$21,067.00).
- 10) Richards R and **Balanay JG** (2015-2019). Preventing Lyme Disease Exposure Among Outdoor Workers. Research Project Grant (Parent R01), University of North Carolina at Chapel Hill (\$118,090.95).
- 9) Richards R and **Balanay JG** (2015). Nationwide Mosquito Susceptibility Screening. Bayer Crop Science (\$22,991.33).
- 8) Richards R and **Balanay JG** (2015). Barrier Spray Efficacy. Bayer Crop Science (\$29,982.32).
- 7) **Balanay JG** and Xu L (2015). Knowledge and Perceptions on Environmental Triggers and Related Education Needs among Parents of Children with Autism Spectrum Disorders. Center for Sustainability 2015 Interdisciplinary Summer Research, East Carolina University (\$7,388.00).
- 6) Beck N and **Balanay JG** (2015). Exposure to Heat Stress, Ultraviolet Radiation and Other Occupational Health Hazards among Groundskeepers at East Carolina University. NIOSH Pilot/Small Research Training Grant, Deep South Center for Occupational Safety and Health, National Institute for Occupational Safety and Health (NIOSH) (\$12,000.00).
- 5) Kearney G, **Balanay JG** and Mannarino A (2015). Multi-site Assessment of Noise Exposure Levels and Personal Protective Equipment Use Among Grounds Maintenance Workers at Public Universities in North Carolina. NC Occupational Safety and Health Education and Research Center – Pilot Project Awards, National Institute for Occupational Safety and Health (NIOSH) (\$8,000.00).
- 4) Richards S, **Balanay JG**, Harris J and Meshnick S (2013-2014). Environmental impacts on effectiveness of permethrin-treated clothing used by foresters to prevent mosquito bites. Feasibility Projects Program in Agricultural Safety & Health Grant, Southeast Center for Agricultural Health and Injury Prevention, National Institute for Occupational Safety and Health (NIOSH) (\$14,994.00).
- 3) Richards S and **Balanay JG** (2013). Research Title: Effectiveness of Insecticide-Treated Clothing to Prevent Tick and Mosquito Exposure in Foresters and Loggers in Western North Carolina. Central Appalachian Regional Education and Research Center (CARERC), National Institute for Occupational Safety and Health (NIOSH) (\$9,992.00).
- 2) **Balanay JG** (2012-2014). Determination of Pressure Drop Across Activated Carbon Fiber (ACF) Respirator Filters and Cartridges. NIOSH Pilot/Small Research Training Grant, Deep South Center for Occupational Safety and Health, National Institute for Occupational Safety and Health (NIOSH) (\$20,000.00).
- 1) **Balanay JG** (2009-2010). Adsorption Characteristics of Activated Carbon Fibers for Toluene. NIOSH Pilot/Small Research Training Grant, Deep South Center for Occupational Safety and Health, National Institute for Occupational Safety and Health (NIOSH) (\$12,000.00).

Not Funded

- 44) Curtis SA and **Balanay JG** (2023). Assessing Occupational and Recreational Noise Levels during National Hockey League Games. Central Appalachian Regional Education and Research Center (CARERC), National Institute for Occupational Safety and Health (NIOSH) (\$15,000.00).
- 43) Sousan S and **Balanay JG** (2023). Estimating Core Body Temperature Using Physiological and Environmental Factors with Random Forest Regression Model. Exploratory/Developmental Research Grant (R21), National Institutes of Health (NIH) (\$428,969).

- 42) Richards SL, **Balanay JB**, and Shearman S (2023). Development and Assessment of Risk Communication Tools: Can Health Education and Risk Communication via Social Media be Improved to Protect Public Health? American Mosquito Control Association (AMCA) Research Fund (\$51,875).
- 41) Kearney G and **Balanay JB** (2022). A Multi-level Assessment Approach to Identify Factors Leading to Fatal Occupational Injuries among Hispanic/Latino Landscaping and Groundskeeping Workers. University of North Carolina – Chapel Hill (\$11,932).
- 40) Stellefson M, and **Balanay JG** (2021). Racial Disparities in Health-Related Quality of Life Among U.S. Adults with COPD. Exploratory/Developmental Research Grant (R21), National Institutes of Health (NIH) via University of Alabama (\$4,029).
- 39) Stellefson M, and **Balanay JG** (2020). Data-Based Advocacy Planning to Address Health Disparities in Black Americans with COPD. American Lung Association, University of Alabama (\$1,310).
- 38) Stellefson M, Ford C, **Balanay JG** and Wang MQ (2020). Health-Related Quality of Life and COPD: The Impact of Race and Environment in the Deep South. Alabama Life Research Institute (ALRI), University of Alabama (\$2,659).
- 37) Maddipati V, **Balanay JG**, Kearney G and Laghi F (2020). Pragmatic Study to Assess the Impact of Filtering Facepiece Respirators on Respiratory Parameters in Patients with Moderate to Severe Respiratory Disease. Novel, High-Impact Studies Evaluating Health System and Healthcare Professional Responsiveness to COVID-19 (R01), Agency for Health Care Research and Quality (938,728.00)
- 36) Sousan S and **Balanay JG** (2020). Determination of End-of-Service Lives of Respirator Cartridges and Filters for Pesticides Used in Agricultural Settings at Different Environmental Conditions. NIOSH Small Research Program (R03), National Institute for Occupational Safety and Health (NIOSH) (\$145,125.00).
- 35) Dillane D and **Balanay JG** (2020). Effect of Labor-Intensive Crop Type on Heat Stress of Agricultural Workers. NIOSH Pilot Research Training Grant, Deep South Center for Occupational Health and Safety, National Institute for Occupational Safety and Health (NIOSH) (\$9,878.00).
- 34) Mizelle E, Lea S, Kearney G, **Balanay JG** and Madero B (2020). An Examination of Culture, Place and Climate Change on Hydration Among Latino Farmworkers. Health Behavior Research Cluster, East Carolina University (\$9,642.54).
- 33) **Balanay JG**, Pokhrel L, Hill W, Humphrey C, Iverson G, Kearney G, Richards S and Sousan S (2020). Environmental Education on Hurricane Preparedness and Response for Community Stakeholders in Eastern North Carolina. Environmental Education Local Grants Program for Region 4 (EPA-EE-20-04), Environmental Protection Agency (EPA) (\$100,000.00).
- 32) Stellefson M, **Balanay JG**, Gudivada V, Wu R and Mohan A (2019). Ecological Risk Factors Associated with Poor Health-Related Quality of Life in North Carolina Residents with Chronic Obstructive Pulmonary Disease (COPD): Multilevel Modeling of Big Data. NIH Research Project Grant (R03), National Institutes of Health (NIH) (\$147,500.00).
- 31) Stellefson M, **Balanay JG**, Gudivada V, Wu R and Wang MQ (2019). Latent Class Analysis of Social Ecological Risk Factors Associated with Physical Inactivity in Adults with COPD: Multi-Level Approach to GIS Mapping and Visual Communication. Academic Research Enhancement Award for Undergraduate-Focused Institutions Program (R15), National Institutes of Health (NIH), National Heart, Lung, and Blood Institute (NHLBI) (\$442,500.00).
- 30) Stellefson M, **Balanay JG**, Gudivada V, Mohan A and Wu R (2019). Environmental Risk Factors Associated with Poor Health Outcomes in North and South Carolina Adults with Chronic Obstructive Pulmonary Disease (COPD): Multi-Level Latent Class Analysis with GIS Mapping. Center for Human Health and the Environment (CHHE) Pilot Project Program (PPP), North Carolina State University (NCSU) (\$36,848.00).
- 29) Sousan S and **Balanay JG** (2019). Determination of End-of-Service Lives of Respirator Cartridges and Filters for Pesticides Used in Agricultural Setting at Different Environmental Conditions. Center for Human Health and the Environment (CHHE) Pilot Project Program (PPP), North Carolina State University (NCSU) (\$33,231.00).
- 28) Stellefson M, **Balanay J** and Mohan A and (2019). Identification of Environmental and Geospatial Risk Factors Associated with Poor Health-Related Quality of Life in North Carolina Residents with Chronic Obstructive Pulmonary Disease (COPD): Multi-Level Modeling of Big Data. Center for Human Health and the Environment (CHHE) Pilot Project Program (PPP), North Carolina State University (NCSU) (\$36,870.57).

- 27) Sousan S, Pokhrel L and **Balanay JG** (2019). Nanotechnology-Enabled Innovative Respirator Filter/Cartridges with Extended Service Life Indicator. Flash Grant Program, North Carolina Biotechnology Center (NCBC) (\$23,969.00).
- 26) Richards S and **Balanay JG** (2019). Use of Permethrin-Impregnated Clothing to Prevent Mosquito Bites and Arboviral Infection. NIH Research Project Grant (Parent R01), University of North Carolina in Chapel Hill (UNC-Chapel Hill) (\$268,907.25).
- 25) **Balanay JG** (2019). Investigation of Activated Carbon Fibers (ACFs) as Dual Filtration and Sorbent Media for Respiratory Protection. National Institutes of Health (NIH) Research Project Grant (Parent R21), University of Alabama at Birmingham (\$10,000.00).
- 24) **Balanay JG** (2018). Investigation of Activated Carbon Fibers (ACFs) as Dual Filtration and Sorbent Media for Respiratory Protection. National Institutes of Health (NIH) Research Project Grant (Parent R21), University of Alabama at Birmingham (\$62,139.00).
- 23) Sousan S and **Balanay JG** (2018). Determination of End-of-Service Lives of Respirator Cartridges and Filters for Pesticides Used in Agricultural Setting at Different Environmental Conditions. NC Occupational Safety and Health Education and Research Center – Pilot Project Awards, National Institute for Occupational Safety and Health (NIOSH) (\$9,935.00).
- 22) Bee B, **Balanay JG** and Ferreira R (2018). The Heat is On: Addressing Heat-Related Illness through Citizen Science in Rural Mexico. National Oceanic and Atmospheric Administration (NOAA) Research Grant (\$535,837.25).
- 21) **Balanay JG** (2016). Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges for Volatile Organic Compounds. NIOSH Small Research Program (R03), National Institute for Occupational Safety and Health (NIOSH) (\$143,962.00).
- 20) Richards S and **Balanay JG** (2016). Effects of sublethal insecticide exposure on vector competence of *Aedes albopictus* for dengue and Zika viruses. NIOSH Exploratory/Developmental Grant Program (R21), National Institutes of Health (NIH) (\$351,234.38).
- 19) Kearney GD and **Balanay JG** (2016). Assessment of Noise Exposure and Safety among Landscaping Service Workers. NIOSH Exploratory/Developmental Grant Program (R21), National Institute for Occupational Safety and Health (NIOSH) (\$330,451.63).
- 18) Humphrey C, Blackmon J and **Balanay JG** (2016). Investigating the Interactions between a Benzene Contaminated Groundwater Plume and Surface Water in an Urbanized Coastal Plain Watershed. Joint Graduate Student Research Funding Opportunity, NCSU Water Resources Research Institute (WRRRI) (\$10,000.00).
- 17) **Balanay JG** and Kearney G (2015-2016). Assessment of Heat Stress and Ultraviolet Radiation Exposures among ECU Groundskeepers. Interdisciplinary Research Collaboration Award 2015-2016, East Carolina University (\$10,263.00).
- 16) Reiskind M, Richards R, Le Prevost C, **Balanay JG** and Byrd B (2015-2016). Contemporary Mosquito Control: Potential for Environmental Exposure and Injustice in Backyards? Center for Human Health and the Environment (CHHE) Pilot Project Program (PPP), North Carolina State University (NCSU) (\$12,176.00).
- 15) Richards S, **Balanay JG** and Langley R (2015). Risk Assessment of Forester Exposure to Hymenoptera. Southeast Center for Agricultural Health and Injury Prevention, Feasibility Projects Program in Agricultural Safety & Health Grant, National Institute for Occupational Safety and Health (NIOSH) (\$12,000.60).
- 14) Richards S, **Balanay JG** and Langley R (2015). Risk Assessment of Forester Exposure to Hymenoptera in the Central Appalachian Region of the United States. Central Appalachian Regional Education and Research Center (CARERC), National Institute for Occupational Safety and Health (NIOSH) (\$11,994.48).
- 13) Richards S and **Balanay JG** (2015). Improvements to Methods for Assessing Duration of Effectiveness of Permethrin-Treated Clothing for Prevention of Mosquito Bites. NC Occupational Safety and Health Education and Research Center – Pilot Project Awards, National Institute for Occupational Safety and Health (NIOSH) (\$9,971.00).
- 12) Richards R and **Balanay JG** (2015). Evaluation of Pesticide Resistance and Mosquito Control in North Carolina. Mosquito Research Foundation Grant 2015, Mosquito Research Foundation (\$45,605.00).
- 11) Richards S, **Balanay JG** and Harris J (2014-2015). Development of a Novel Assay to Assess Forester Exposure to Tick-borne Pathogens in Southern United States. NIOSH Pilot/Small Research

- Training Grant, Deep South Center for Occupational Health and Safety, National Institute for Occupational Safety and Health (NIOSH) (\$17,346.00).
- 10) **Balanay JG** (2014-2016). Adsorption Characteristics of Activated Carbon Fibers in Respirator Cartridges and Filters for Volatile Organic Compounds. NIOSH Small Research Program (R03), National Institute for Occupational Safety and Health (NIOSH) (\$116,635.00).
 - 9) **Balanay JG**, Kearney G, Hao H and Chen R (2014-2017). Respiratory Health Impacts and Mitigation of Residential Indoor Air Pollution among the Coharie Indian Tribal Communities in North Carolina. EPA STAR Grant: Science for Sustainable and Healthy Tribes – Indoor Air Impacts, Environmental Protection Agency (EPA) (\$919,776.00).
 - 8) Richards S, **Balanay JG** and Harris J (2013-2014). A Novel Multiplex TaqMan qPCR Assay for the Detection of Tick-borne Pathogens in the Central Appalachian Region of the United States. Central Appalachian Regional Education and Research Center (CARERC), National Institute for Occupational Safety and Health (NIOSH) (\$11,900.00).
 - 7) **Balanay JG** and Stuart A (2013-2014). Assessment of Noise Exposure and Associated Hearing Effects among Hospital-Based Helicopter Transport Personnel. East-West Research Collaboration Award, East Carolina University (\$20,207.00)
 - 6) Kearney G, Shaw R and **Balanay JG** (2012-2013). Assessment of Respiratory Symptoms and Lung Function Among Poultry Confinement Workers in Eastern North Carolina: A Pilot Study. Great Plains Center for Agricultural Health (GPCAH), National Institute for Occupational Safety and Health (NIOSH) (\$12,705.00).
 - 5) **Balanay JG** and Stuart A (2012-2013). Assessment of Noise Exposure and Associated Hearing Effects among Hospital-Based Helicopter Transport Personnel. East-West Research Collaboration Award, East Carolina University (\$24,197.00)
 - 4) Kearney G, Shaw R and **Balanay JG** (2012-2013). Assessment of Respiratory Symptoms Among Poultry Farmers/Workers in Eastern North Carolina. Feasibility Projects Program in Agricultural Safety & Health Grant, Southeast Center for Agricultural Health and Injury Prevention, National Institute for Occupational Safety and Health (NIOSH) (\$14,756.00).
 - 3) Richards S, **Balanay JG** and Anderson A (2012-2013). Risk Assessment and Mitigation of Occupational Hazards Facing Loggers in Eastern North Carolina. Feasibility Projects Program in Agricultural Safety & Health Grant, Southeast Center for Agricultural Health and Injury Prevention, National Institute for Occupational Safety and Health (NIOSH) (\$15,000.00).
 - 2) Beam M, Siraj D, Ambelu A, Beyene A, Haileamlak A, **Balanay JG**, Tutor R and Kearney G (2012-2014). Development of an Occupational Health and Workplace Safety Infrastructure and Mapping Tool for Ethiopia. Planning Grants for Hubs of Interdisciplinary Research and Training in Global Environmental and Occupational Health (GEOHealth), National Institutes of Health (NIH) (\$50,000).
 - 1) **Balanay JG** (2010-2012). Assessment of the Adsorption Characteristics of Activated Carbon Fibers for Toluene in Application for Respiratory Protection. EPA Science to Achieve Results (STAR) Grant, Environmental Protection Agency (EPA) (\$74,000).

Pending

None

GRADUATE STUDENT RESEARCH ADVISING/ MENTORSHIP

Graduated

- 1) Bridget Angol, MS Environmental Health, graduated 2024 – Thesis: “Comparison between WBGT App Prototype and WBGT Monitor to Assess Heat Stress Risk in Groundskeeping in an Eastern North Carolina University Setting”
- 2) Samantha Curtis, MS Environmental Health, graduated 2024 – Thesis: “Assessing Occupational and Recreational Noise Levels during National Hockey League Games and its Impact on Employees and Attendants”
- 3) Ryan Mohansingh, MS Environmental Health, graduated 2024 – Professional Paper: “Assessing the Effects of Occupational Heat Stress on the After-Work Productivity, Social Interactions and Emotional Well-Being of Environmental Service Workers”

- 4) Jobert Exsatel, MS Environmental Health, graduated 2023 – Professional Paper: “Toward Assessing Heat Stress Risk: Comparing Wet Bulb Globe Temperature Index versus Corrected Air Temperature”
- 5) Jacqueline Russell, MS Environmental Health, graduated 2023 – Professional Paper: “The Effectiveness of Field Sanitation Team Training on Preventative Medicine Measures in Austere Army Environments”
- 6) Danielle Dillane, Doctor of Public Health (DrPH), graduated 2022 – Dissertation: “Accuracy of Wet Bulb Globe Temperature (WBGT) obtained from Regional Weather Station Data for Agricultural Settings in Eastern North Carolina as Proxy for WBGT obtained from Local Heat Stress Monitors”
- 7) Nanaobaayaa Owusu, MS Environmental Health, graduated 2022 – Thesis: “Solar Ultraviolet Radiation Exposure during Cold Seasons in Eastern North Carolina”
- 8) Astrid Haugen, MS Environmental Health, graduated 2020 – Professional Paper: “Environmental Contributors to Autism Spectrum Disorder in Federal-Funded Research”
- 9) Christina Gardner, MS Environmental Health, graduated 2020 – Professional Paper: “Radon Exposure Experienced by Residents in Mountainous Communities of North Carolina and Resident Knowledge of the Dangers of Radon”
- 10) Constantine Unanka, MS Environmental Health/ Master of Public Health, graduated 2020 – Professional Paper: “Assessment of Breakthrough Occurrence in Respirator Filter Cartridge using Dimethoate”
- 11) Gabriel Beattie-Sergio, MS Environmental Health, graduated 2019 – Professional Paper: “Assessment of Breakthrough Occurrence in Respirator Filter Cartridge using Dimethoate”
- 12) Pahola Salas, MS Environmental Health, graduated 2018 – Thesis: “Effects of Thermal Regeneration of Activated Carbon Fibers on Adsorption Characteristics for Toluene”
- 13) Kevin Kearney, MS Environmental Health, graduated 2018 – Professional Paper: “Exposure Control and Process Safety in Selected Plastics and Rubber Industries
- 14) Jessica Trotman, MS Environmental Health, graduated 2018 – Professional Paper: “Heat Related Illness in Senior Populations of Polk, McDowell and Rutherford Counties of North Carolina: A Survey of Senior Centers”
- 15) Nadya Majette-Elliott, MS Environmental Health, graduated 2017 – Professional Paper: “Examining Sources of High Noise Levels in Occupational Settings”
- 16) Nwanne Agada, MS Environmental Health, graduated 2017 – Thesis: “Duration of Effectiveness of Permethrin-Treated Clothing Against *Aedes albopictus* and *Culex pipiens* complex Mosquitoes After Repeated Washing
- 17) Chelsea Curry, MS Environmental Health, graduated 2017 – Professional Paper: “Safety Polices and Hazardous Waste Control Program for E-Cigarettes”
- 18) Nicole Beck, MS Environmental Health, graduated 2016 – Thesis: “Exposure to Heat Stress, Solar Ultraviolet Radiation and Other Occupational Health Hazards among Groundskeepers at East Carolina University
- 19) Casey Radford, MS Environmental Health, graduated 2016 – Professional Paper: “Sources of Elevated Blood Lead Levels among Children in Buncombe County”
- 20) Sarah Bajwa, MS Environmental Health, graduated 2016 – Professional Paper: “Indoor Air Quality in Homes of Coharie Indian Tribes”
- 21) Adam Mannarino, MS Environmental Health/ Master of Public Health, graduated 2015 – Professional Paper: “Noise Exposure Assessment among Groundskeepers: A Pilot Study”
- 22) Arnold Raynor, MS Environmental Health, graduated 2015 – Professional Paper: “Promotion of Environmental Public Health and Safety into the Plans, Policies and Practices of Urban Planning and Inspections”
- 23) Wiley Cockrell, MS Environmental Health, graduated 2014 – Professional Paper: “Assessment of the Effectiveness of Engineering Controls in Noise Reduction Related to 4-Roll Calender Operations in Tire Manufacturing Machinery”
- 24) Adepeju Adesina, MS Environmental Health, graduated 2014 – Thesis: “Determination of Breathing Resistance Across Activated Carbon Fiber Respirator Cartridges Using Sinusoidal Airflow”
- 25) John McLamb, MS Environmental Health, graduated 2013 – Professional Paper: “A Comparison of the Implementation of Safety Culture Principles at Biomedical Research Institutions”
- 26) Amber Sarver, MS Environmental Health, graduated 2013 – Professional Paper: “Estimating Employee Noise Exposure Profiles Using Task-Based Time-Motion Summaries”
- 27) Joe Amiotte, MS Environmental Health, graduated 2013 – Professional Paper: “Seat Belt Usage

- Intervention for Motor Vehicle Crash Prevention on the Pine Ridge Reservation, South Dakota
- 28) Linda Youmans-McDonald, MS Environmental Health, graduate 2013 – Professional Paper: “A Cost Effective and Efficient Method for Measuring Low Level Beryllium and Other Metals on a Single Air Filter or Surface Wipe”

GRADUATE STUDENT COMMITTEE SERVICE

Graduated (East Carolina University)

- 1) Aida Rodriguez, Doctor of Public Health (DrPH) student, graduated 2024
- 2) Vinod Kamalam Surendran, MS Environmental Health, graduated 2024
- 3) Nicole Thomas, MS Environmental Health, graduated 2024
- 4) Ashlee Davis, Doctor of Public Health (DrPH) student, graduated 2024
- 5) Megan Mangiafico, MS Occupational Safety, graduated 2024
- 6) Heidi Knecht, Doctor of Public Health (DrPH), graduated 2022
- 7) Michael Matthews, MS Environmental Health, graduated 2022
- 8) Justin Kerbow, MS Environmental Health, graduated 2022
- 9) Dillon Streuber, MS Environmental Health, graduated 2021
- 10) Pablo Carvajal, MS Environmental Health, graduated 2021
- 11) Jordan Mazzara, MS Environmental Health, graduated 2021
- 12) Swastika Regmi, MS Environmental Health, graduated 2020
- 13) Melinda Fields, MS Environmental Health, graduated 2020
- 14) Kevin Ogoegbunam, MS Occupational Safety, graduated 2019
- 15) Avian White, MS Environmental Health, graduated 2018
- 16) Heidi Knecht, MS Environmental Health, graduated 2018
- 17) Danielle Carter, MS Environmental Health, graduated 2018
- 18) Justin Bunn, MS Environmental Health, graduated 2017
- 19) Joshua Volkan, MS Environmental Health, graduated 2016
- 20) Stacy Freeman, MS Occupational Safety, graduated 2016
- 21) Troy McCallister, Master of Public Health, graduate 2016
- 22) Amber Van Dusen, MS Environmental Health, graduated 2014
- 23) Jonathan Harris, MS Environmental Health, graduated 2014
- 24) Robert Edwin Stott II, MS Environmental Health, graduated 2014
- 25) Kathryn Pink, MS Environmental Health, graduated 2014
- 26) Ben Kane, MS Environmental Health, graduated 2014
- 27) Danielle Jones, MS Environmental Health, graduated 2014
- 28) Katie Del Rosario, MS Environmental Health, graduated 2013
- 29) Heather Durand, MS Environmental Health, graduated 2013
- 30) Eric Green, MS Environmental Health, graduated 2013
- 31) Michael Phillips, MS Environmental Health, graduated 2013
- 32) Chris Avery, MS Environmental Health Sciences, graduate 2012
- 33) Tanyi Obenson, MS Environmental Health, graduated, 2012

Graduated (University of Alabama at Birmingham)

- 1) Melike Dizbay-Onat, PhD in Materials Engineering, graduated, 2015
- 2) Margaret Summers, PhD in Environmental Health Sciences, graduated, 2022

UNDERGRADUATE STUDENT RESEARCH ADVISING

- John Longa, BS Environmental Health, 2013 – awarded the Undergraduate Research and Creativity Award (URCA), East Carolina University for study titled, “Effects of Composition and Orientation of Activated Carbon Fibers on Pressure Drop in Respirator Cartridges” (\$1,440.00)
- Emily Bethea, BS Environmental Health, 2015 – awarded the Undergraduate Research and Creativity Award (URCA), East Carolina University for study titled, “Assessment of Occupational Exposure of Animal Facility Personnel to Mouse Urinary Aeroallergens” (\$2,121.00)

- Rene Vanek, BS Environmental Health, 2016 – awarded the Undergraduate Research and Creativity Award (URCA), East Carolina University for study titled, “Assessment of Exposure to Volatile Organic Compounds during 3D Printing in a Laboratory at East Carolina University” (\$1,875.00)
- Kellyn Reese, BS Public Health Studies, 2017 – mentored for study titled, “Volatile Organic Compound (VOC) Emissions in a University Printing Press Facility in Eastern North Carolina”\ Omar Chaaban, BS Public Health, 2022 – co-mentored for study titled, “How Effective are the Aerosol Filtration Efficiencies of Masks and Fabrics Used by Healthcare Workers during the COVID-19 pandemic?”
- Omar Chaaban, BS Public Health, 2022 – co-mentored for study titled, “How Effective are the Aerosol Filtration Efficiencies of Masks and Fabrics Used by Healthcare Workers during the COVID-19 pandemic?”
- William Murray, BS Public Health, 2023 – co-mentored for study titled, “Environmental Assessment of PM_{2.5} Concentration at ECU Transit Bus Stops with Low-Cost Aerosol Sensors”

HONORS, AWARDS AND RECOGNITION

- 2025: Copyright registrant of app prototype, East Carolina University, Greenville, NC
- 2024: Health Sciences Author Recognition Award, William E. Laupus Health Sciences Library, East Carolina University, Greenville, NC
- 2024: Scholar-Teacher Award, Provost and Vice Chancellor for Academic Affairs, East Carolina University, Greenville, NC
- 2024: Nominee, Outstanding Researcher Award, College of Health and Human Performance, East Carolina University, Greenville, NC
- 2019: Health Sciences Author Recognition Award, William E. Laupus Health Sciences Library, East Carolina University, Greenville, NC
- 2019: Nominee, Supervisor of the Year, Student Employment Office, East Carolina University, Greenville, NC
- 2018: Nominee, Outstanding Faculty Mentor of the Year, Honors College, East Carolina University, Greenville, NC
- 2015: Nominee, 2014-2015 Ray Martinez Teaching Excellence Award, College of Health and Human Performance, East Carolina University, Greenville, NC
- 2014: Nominee, 2013-2014 Ray Martinez Teaching Excellence Award, College of Health and Human Performance, East Carolina University, Greenville, NC
- 2014: Best of Session Award, “Assessment of Occupational Health and Safety Hazard Exposures among Working College Students”, American Industrial Hygiene Conference and Exposition (AIHce) 2014, San Antonio, TX
- 2011: Induction into *Epsilon Nu Eta*, the East Carolina University Environmental Health Honor Society
- 2011: Induction into *Delta Omega Honorary Society in Public Health*, School of Public Health, University of Alabama at Birmingham (UAB), Birmingham, AL
- 2009: American Industrial Hygiene Foundation (AIHF) Scholarship, 2009 American Industrial Hygiene Conference and Exposition (AIHce), Toronto, Ontario, Canada
- 2009: Vernon E. Rose Endowed Scholarship, School of Public Health, University of Alabama at Birmingham (UAB), Birmingham, AL
- 2008: Best of Session Award, Student Poster Category, “Comparison of Adsorption Characteristics between Granular Activated Carbon (GAC) and Activated Carbon Fibers (ACFs) for Toluene”, American Industrial Hygiene Conference and Exposition (AIHce) 2008, St. Paul, MN
- 2003: Outstanding Academic Achievement Award, School of Public Health, University of Minnesota, Minneapolis, MN
- 2002: Best of Session Award, Student Poster Category, “Indoor Air Quality Management during Construction Relocation of a Bone Marrow Transplant Unit”, American Industrial Hygiene Conference and Exposition (AIHce) 2002, San Diego, CA
- 2001: Fogarty International Center Scholarship, U.S. National Institutes of Health
- 1997: *Cum laude*, University of the Philippines Manila, Philippines

INSTITUTIONAL AND PROFESSIONAL SERVICE

University of North Carolina (UNC) System-Wide Committee Membership

2021-2022: Member, Executive Committee, Asian and Pacific Islander Caucus for UNC System Faculty and Staff

University Committee Membership

2025-2027: Faculty Senator, East Carolina University

2021-2023: Chair, Safety and Security Committee, East Carolina University

2020-2021: Member, Safety and Security Committee, East Carolina University

2020-2023: Member (Alternate), Reconsideration Committee, East Carolina University

2018-2020: Chair, Teaching Grants Committee – The committee reviews and recommends submitted proposals from faculty members for teaching grant awards.

2014-2018: Member, Teaching Grants Committee – The committee reviews and recommends submitted proposals from faculty members for teaching grant awards.

2013-2015: Member, Dictionary of Agromedicine Editorial Advisory Committee, North Carolina Agromedicine Institute (NCAI) – The committee is responsible for editing a Dictionary of Agromedicine that is made available as a searchable database on the NCAI website.

2012-present: Faculty affiliate, North Carolina Agromedicine Institute (NCAI) - I serve as an adviser for the Institute on new initiatives and priorities, and to participate in Institute meetings and forum as venue to share research results, ideas, strategic planning, and funding opportunities.

Departmental Committee and Other Departmental Service

2017-present: Member, Department Personnel Committee, Department of Health Education and Promotion, East Carolina University

2020-2021: Chair, Taking Care of Business (TCB) Committee, Department of Health Education and Promotion, East Carolina University – The committee is responsible for coordinating the activities related to major life events of faculty and staff and annual holiday socials.

2020: Member, Faculty Search Committee, Department of Health Education and Promotion, East Carolina University – The committee screened and interviewed applicants for 1 fixed-term faculty position (teaching/research technician role) within the Environmental Health Sciences Program, Department of Health Education and Promotion.

2017-2018: Member, Department Diversity Committee, Department of Health Education and Promotion, East Carolina University

2018-2019: Chair, Faculty Search Committee, Department of Health Education and Promotion, East Carolina University – The committee screened and interviewed applicants for 1 tenure-track faculty position within the Environmental Health Sciences Program, Department of Health Education and Promotion.

2017-2018: Member, Faculty Search Committee, Department of Public Health, East Carolina University – The committee screened and interviewed applicants for 2 tenure-track faculty positions within the Department of Public Health.

2016: Member, Faculty Search Committee, Department of Health Education and Promotion, East Carolina University – The committee screened and interviewed applicants for 3 tenure-track faculty positions within the BS Public Health Studies (BSPHS) program.

2016: Member, Faculty Search Committee, Department of Technology Systems, East Carolina University – The committee screened and interviewed applicants for 1 visiting Assistant/ Associate Professor or Instructor faculty positions within the MS Occupational Safety (MSOS) program.

2011-2020, 2021-present: Member, Taking Care of Business (TCB) Committee, Department of Health Education and Promotion, East Carolina University – The committee is responsible for coordinating the activities related to major life events of faculty and staff and annual holiday socials.

2012-present: Departmental Safety Representative, Department of Health Education and Promotion, East Carolina University – I serve as the primary point of contact between the department and university units responsible for safety and compliance by facilitating implementation of safety, health and environmental programs and policy.

Editorial Board Membership

2025 – Guest co-editor, International Journal of Environmental Research and Public Health
2024 – Guest editor, Journal of Occupational and Environmental Hygiene
2023 – present: Editorial review board member, Journal of Occupational and Environmental Hygiene
2022 – 2023: Review editor, Editorial Board of Health of Women in the Workplace (specialty section),
Frontiers in Global Women's Health
2019 – present: Deputy editor-in-chief, Environmental Health Insights
2015-2016, 2018-2019: Editorial board member, Environmental Health Insights

Manuscript Reviewer

2025: International Journal of Occupational Safety and Ergonomics, March 2025
2025: Journal of Occupational and Environmental Hygiene, February 2025
2025: Annals of Work Exposure and Health, January 2025
2024: Journal of Occupational and Environmental Hygiene, January, April, June, July, September,
October, December 2024
2024: Annals of Work Exposure and Health, October 2024
2024: International Journal of Occupational Safety and Ergonomics, December 2024
2023: Journal of Occupational and Environmental Hygiene, January, July, September and November
2023
2022: Inquiry, June 2022
2022: Annals of Work Exposure and Health, May and June 2022
2022: Journal of Occupational and Environmental Medicine, April 2022
2021: Journal of Occupational and Environmental Hygiene, June 2021
2021: International Journal of Environmental Health Research, April and June 2021
2021: International Journal of Injury Control and Safety Promotion, January 2021
2020: Kotuitui: New Zealand Journal of Social Sciences Online, October 2020
2020: Annals of Work Exposure and Health, July 2020
2020: Journal of Occupational and Environmental Hygiene, April and May 2020
2020: Annals of the Brazilian Academy of Science, April and June 2020
2020: Journal of Occupational Health, February 2020
2019: Archives of Environmental and Occupational Health, September 2019
2019: The Laryngoscope, September 2019
2019: Indoor and Built Environment, August 2019
2019: American Journal of Public Health, July 2019
2019: International Journal of Audiology, June 2019
2019: American Journal of Public Health, April 2019
2019: Annals of Work Exposure and Health, March and August 2019
2019: Journal of Occupational and Environmental Hygiene, February 2019
2018: Journal of Occupational and Environmental Hygiene, December 2018
2018: International Journal of Environmental Research and Public Health, November 2018
2018: International Journal of Audiology, October 2018
2018: Toxics, September 2018
2018: Journal of Occupational and Environmental Hygiene, January 2018
2017: Journal of Occupational and Environmental Hygiene, December 2017
2017: Fibers and Polymers, December 2017
2017: Annals of Work Exposure and Health, December 2017
2017: Acta Medica Philippina, October 2017
2017: Materials, September 2017
2017: Environmental Engineering and Management Journal, June 2017
2017: Environments, March 2017
2017: Biomedical and Environmental Sciences, March 2017
2016: Journal of Occupational and Environmental Hygiene, November 2016
2016: Environmental Health Insights, July 2016
2016: American Journal of Industrial Medicine, April 2016
2016: Acta Medica Philippina, April 2016
2016: International Journal of Environmental Research and Public Health, February and June 2016
2016: Pesticide Management Science, January 2016

2015: Environmental Health Insights, July and September 2015
2015: Canadian Journal of Higher Education, May 2015
2015: American Journal of Industrial Medicine, February 2015
2014: Occupational Health – South Africa (OHSA) Journal, December 2014
2014: Recent Patents on Chemical Engineering, October 2014
2014: Journal of Public Health Management and Practice, August 2014
2014: Journal of Diabetology and Metabolic Syndrome, August 2014
2013: Adsorption Science and Technology Journal, December 2013
2013: Journal of Agromedicine, December 2013
2013: Journal of Occupational and Environmental Hygiene, August 2013

Book Proposal Reviewer

2015: Wiley-Blackwell Publishing Ltd., December 2015

Book Module Reviewer

2017: Perceivant LLC, August 2017

Research Proposal Reviewer

2024: Deep South Center for Occupational Health and Safety, May 2024 (1 pilot project proposal reviewed)
2022: Deep South Center for Occupational Health and Safety, April 2022 (3 pilot project proposals reviewed)
2021: Deep South Center for Occupational Health and Safety, April 2021 (2 pilot project proposals reviewed)
2020: U.S. Department of Agriculture, National Institute of Food and Agriculture (NIFA), Small Business Innovation Research (SBIR) Program Phase 1, June 2020 (1 project proposal reviewed)
2018: Deep South Center for Occupational Health and Safety, April 2018 (2 pilot project proposals reviewed)
2017: Deep South Center for Occupational Health and Safety, April 2017 (1 pilot project proposal reviewed)
2016: Deep South Center for Occupational Health and Safety, May 2016 (3 pilot project proposals reviewed)
2014: Deep South Center for Occupational Health and Safety, May 2014 (2 pilot project proposals reviewed)

Other Professional Service Activities

2022-present: Member, Thermal Stress Working Group, American Industrial Hygiene Association (AIHA)
2021-2023: Member, Climate Change Adaptation Task Force Group, American Industrial Hygiene Association (AIHA)
2021-present: Adjunct Associate Professor, Department of Public Health, Brody School of Medicine, East Carolina University
2018-present: Adjunct Associate Professor, Environmental Health Sciences, Department of Environmental Health Sciences, School of Public Health, University of Alabama at Birmingham (UAB)
2017: Invited guest speaker, "Industrial Hygiene Career and Research" (Webinar). American Industrial Hygiene Association (AIHA) Technical Meeting, CUNY Student Section, City University of New York, New York, NY, May 8, 2017
2016-present: Founder and faculty adviser, American Industrial Hygiene Association (AIHA) ECU Student Section
2016-2021: External advisory board member, Southeast Center for Agricultural Health and Injury Prevention (SCAHIP), University of Kentucky
2015: Invited guest speaker, "Industrial Hygiene and Safety", American Society of Safety Engineers (ASSE) Technical Meeting, ECU Student Section, East Carolina University, Greenville, NC, February 13, 2015
2013-present: Member, Industrial Hygiene Alumni Advisory Board, Deep South Center for Occupational Health and Safety
2006-present: Full/Student Member, American Industrial Hygiene Association (AIHA)
2009-present: Diplomate, Academy of Industrial Hygiene

2001-2006: Member, American Conference of Governmental Industrial Hygienists (ACGIH)

1997-1998: Junior Member, Philippine Association of Medical Technologists (PAMET)

TEACHING ACTIVITIES

List of Courses Taught in East Carolina University (ECU)

Undergraduate Courses

- 1) EHST 2110: Introduction to Environmental Health (3 credits). This course is designed to provide a background on issues related to environmental and public health and the principles of environmental health practices. Topics emphasized include air pollution, safe water, food safety, industrial hygiene, radiation, vectors, and solid and hazardous wastes. I taught this course in the 1st summer session of 2014.
- 2) EHST 3060: Environmental Issues in Construction (4 credits). This course is a comprehensive overview of environmental health issues related to the construction industry including environmental impact of construction, hazardous materials in the construction processes, and regulatory processes and requirements. I taught this course in both Fall and Spring semesters from 2011-2015, and in the Spring semester only from 2016-2018 and 2022-2023.
- 3) EHST 3061: Environmental Issues in Construction Laboratory (0 credit). This course is a co-requisite of EHST 3060 and is designed to reinforce the knowledge obtained from EHST 3060 through group activities. It covers topics on environmental health issues related to the construction industry including environmental impact of construction, hazardous materials in the construction processes, and regulatory processes and requirements. I taught this course in the Fall and Spring semesters from 2011-2016.
- 4) EHST 3502: Problems in Environmental Health (3 credits). This course is designed to provide the student a hands-on experience on conducting laboratory research, literature review search and other project activities related to environmental health. I taught this course in the Fall semester of 2014 and 2017.
- 5) EHST 3600: Air Pollution (3 credits). This course focuses on the evaluation and monitoring of air pollutants, effects of air pollutants, survey of control procedures and legislation, and lab procedures in air quality investigations. I taught this course in the Fall semester from 2016-2018 and 2022-2024.
- 6) EHST 3700: Industrial Hygiene (3 credits). This course is designed to introduce the students to the discipline of industrial hygiene, which is the recognition, evaluation and control of workplace health hazards. It includes topics such as the basic principles and concepts in industrial hygiene, workplace health hazards in different occupations, instrumentation used in evaluating these hazards, and regulatory environment involved in industrial hygiene. I teach this course in the Spring semester since 2012.
- 7) EHST 3701: Industrial Hygiene Laboratory (1 credit). This course is a co-requisite of EHST 3700 and is designed to introduce the students to the evaluation and control of workplace health hazards through instrumentation and problem solving. It includes topics such physical and chemical hazards, and respirator fit testing. I teach this course in the Spring semester since 2012.
- 8) EHST 3900: Introduction to Occupational Health (3 credits). This course is designed to introduce students to the basic principles and concepts in occupational health, workplace hazards and associated health effects and diseases, occupational health professions, evaluation and control of workplace hazards, and regulatory environment involved in occupational health. I teach this course in the Fall semester since 2011.

Graduate Courses: Master's Level

- 1) EHST 6010: Fundamentals of Environmental Health (3 cr). This course provides a broad introduction to the effects of the environment on human health. I taught this course in the Summer of 2019
- 2) EHST 6201/6202/6203: Individual Studies (1-3 credits). This course is designed to aid student in the preparation, writing and completion of professional paper.

- 3) EHST 6210: Topics in Environmental Health (Part 1: APA Style Writing/ Topic Choice Course) (1 credit). This course was initially designed to aid students in writing in APA (American Psychological Association) style and redesigned to assist students in determining their project topic and forming their committee. This is the first part of a 3-part series of writing courses that are aimed to prepare students for the writing of a professional paper or thesis. I taught this course in the Summer of 2012.
- 4) EHST 6220: Topics in Environmental Health (Part 2: Literature Review Paper Writing Course) (2 credits). This course is designed to aid students in choosing their research topic, conduct their literature review, and form their professional paper or thesis committee. This is the 2nd part of a 3-part series of writing courses that are aimed to prepare students for the writing of a professional paper or thesis. I teach this course every semester since Summer 2012.
- 5) EHST 6230: Topics in Environmental Health (Part 3: Research Proposal Writing Course) (3 credits). This course is designed to aid students in writing a research proposal and acquiring approval of such proposal from their professional paper or thesis committee. This is the 3rd part of a 3-part series of writing courses that are aimed to prepare students for the writing of a professional paper or thesis. I teach this course every semester since Summer 2012.
- 6) EHST 6700: Industrial Hygiene Application (3 credits). This course covers the advanced principles and concepts in industrial hygiene, workplace health hazards in different occupations and their evaluation and control, and regulatory environment involved in industrial hygiene. Emphasis is placed on the evaluation of health hazards using instrumentation and problem solving skills. I teach this course in the Summer term since 2012.
- 7) EHST 6701: Industrial Hygiene Application Laboratory (1 credit). This course is a co-requisite of EHST 6700 and is designed to cover the methods of measurement and other tools used by industrial hygienists for the evaluation of workplace health hazards, with emphasis placed on the use of instrumentation and problem solving skills. I teach this course in the Summer term since 2012.
- 8) EHST 6980: Environmental Health Practicum (3 credits). This course involves directed work experience in a clinical or environmental health agency. I teach this course as needed since Fall 2019.
- 9) EHST 6990: Environmental Health Professional Paper (3 credits). This course involves the writing of the professional paper, which demonstrates a detailed summary of applied learning experience to environmental health action, intervention, or increased knowledge in the field. This may be taken by graduate students who are admitted to the applied option of the MS Environmental Health. I teach this course every semester since Spring 2013.
- 10) EHST 7000: Thesis Research (1-6 credits). This course involves the writing of thesis, which demonstrates a detailed summary of applied learning experience to environmental health action, intervention, or increased knowledge in the field. This course may be repeated and may be taken by graduate students who are admitted to the research option of the MS Environmental Health. I teach this course as needed since Spring 2014.
- 11) MPH 6992: MPH Professional Paper (1 credit). This course includes applied learning exercise on the implementation of public health and epidemiologic research methodology. This involves the implementation of the student's proposal, analysis of their results, and writing a public health research article that is ready for submission to a peer-reviewed scientific journal. I co-taught this course in Spring 2019.

Graduate Courses: Doctoral Level

- 1) PUBH 8007: Advanced Industrial Hygiene Application (3 credits). This course covers the advanced principles and concepts in industrial hygiene: the evaluation, prevention and management of occupational hazards. I teach this course in the Spring semester from 2019-2020.
- 2) PUBH 8684: Field Practicum (5 credits). This course requires students to integrate and synthesize their knowledge and skills through the application of public health theories and principles to the development and implementation of one or more special projects in professional public health practice. I taught this course in Spring Semester 2020.
- 3) PUBH 9000: Dissertation Research (3 credits). This course is designed for students to complete all required dissertation research and submission of dissertation in final committee-approved form. This course may be repeated and taken by doctoral students admitted to the Doctor of Public Health (DrPH) program. I taught course as needed from Fall 2020 – Spring 2021.

List of Courses Taught in Other Universities

Undergraduate Courses

- 1) PH 137: Radiological Health (1 credit), University of the Philippines Manila
- 2) PH 131: Human Physiology (2.5 credits), University of the Philippines Manila
- 3) PH 136: Environmental Health (3 credits), University of the Philippines Manila

Graduate Courses

- 1) ENH 626: Physical Agents (3 credits), University of Alabama at Birmingham
- 2) OH 211: Industrial Safety (2 credits), University of the Philippines Manila
- 3) OH 202: Industrial Hygiene Technology (2 credits), University of the Philippines Manila
- 4) EH 201: Principles and Methods of Environmental Health (2 credits), University of the Philippines Manila
- 5) OH 201: Principles and Methods of Occupational Health (2 credits), University of the Philippines Manila
- 6) OH 204: Environmental Physiology (2 credits), University of the Philippines Manila
- 7) OH 205: Environmental Pollution (1 credit), University of the Philippines Manila
- 8) OH 210: Workplace Sanitation (1 credit), University of the Philippines Manila

TEACHING GRANT

Awarded

- 1) **Balanay JG** (2021). Development of a Demonstration Video Library on Workplace Hazard Sampling and Monitoring for Multilevel Industrial Hygiene Laboratory Courses. Teaching Grants Committee, East Carolina University (\$10,000).

STUDENT ACADEMIC ADVISING

Undergraduate Level

2012-2018: Advised between 5 and 14 students per semester in the BS Environmental Health program regarding undergraduate degree requirements and class schedules

Doctoral Level

2018-2022: Advised 1-2 students per semester in the Doctor of Public Health (DrPH) program regarding doctoral degree requirements and class schedules

Last Revision: March 28, 2025