

## CURRICULUM VITAE

Jason W. Marion

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### EDUCATION

- 2011 Ph.D., Public Health in Environmental Health Sciences, College of Public Health, The Ohio State University, Columbus, Ohio. Minor: Epidemiology  
Dissertation: *Protecting Public Health at Inland Ohio Beaches: Development of Recreational Water Quality Indicators Predictive of Microbial and Microcystin Exposure*  
**Committee:** Timothy J. Buckley (Advisor), Jiyoung Lee (Co-Advisor), Stan Lemeshow, John Wilkins III
- 2010 M.S., Public Health in Environmental Health Sciences, College of Public Health, The Ohio State University, Columbus, Ohio. Minor: Epidemiology  
**Co-Advisors:** Timothy J. Buckley & Jiyoung Lee
- 2006 M.S., Biology with emphasis in Regional Analysis, College of Science & Technology, Morehead State University, Morehead, Kentucky.  
Research: *An Evaluation of a Real-Time Water Quality Biomonitor using Corbicula fluminea*  
**Co-Advisors:** David P. Smith & Brian C. Reeder
- 2004 B.S., Environmental Science with emphasis in Biology and Regional Analysis, College of Science & Technology, Morehead State University, Morehead, Kentucky. (Received *Magna Cum Laude* honors).
- 2001 A.A.S., Recreation and Wildlife Management, School of Natural Resources, Hocking College, Nelsonville, Ohio

### PROFESSIONAL EXPERIENCE

**Summary:** I have obtained a diverse skill set with 23 years of public service experience spanning government natural resources/environmental agencies and higher education institutions in Ohio and Kentucky. My current academic position is at Eastern Kentucky University, a teaching-intensive, service-intensive, civically engaged university that serves the 22 counties of south central and southeastern Kentucky. Currently, I serve the Commonwealth of Kentucky as the academic member of the drinking water and wastewater operator certification boards, and I also serve as a regent and secretary with the Eastern Kentucky University Board of Regents. Previously, I served as the President of the Association of Environmental Health Academic Programs which represented 31 environmental health programs accredited by the National Environmental Health Science and Protection Accreditation Council (EHAC). My research interests pertain to translational science focusing on water, sanitation, hygiene (WASH), antibiotic use, and One Health factors impacting recreational water quality, drinking water quality, and global health. My research has informed aspects of the 2012 U.S. Recreational Water Quality Criteria (RWQC) published by the U.S. EPA., and I have I have several on-going projects related to practical drinking and surface water quality determination methods for low-resource settings and citizen science groups in Appalachia and western Kenya. As an educator, I was recently honored with Eastern Kentucky University's highest teaching honor for two consecutive years, being named "Critical Reading Teacher of the Year".

#### Research Areas:

- Epidemiology of drinking water illnesses in low resource communities
- Household water treatment/disinfection methods
- Field methods for enumeration of antibiotic-resistant bacteria in water
- Cyanobacteria in inland U.S. lakes
- Antibiotic residues in village-based dairy products in developing nations
- Impacts of drinking water perceptions on health in Central Appalachia

## CHRONOLOGY OF UNIVERSITY EMPLOYMENT

- Aug 2016 – Present     **Associate Professor**, Department of Environmental Health Science, College of Health Sciences, Eastern Kentucky University, Richmond, Kentucky.  
Courses: Undergraduate courses in Water & Health, Water & Health Laboratory, Environmental Disease Detective (Epidemiology), Recreational Health. Graduate courses in Environmental Research Methods, Biostatistics in Health Sciences, and Survey of Public Health Statistical Analysis.
- Aug 2012 – Aug 2016     **Assistant Professor**, Department of Environmental Health Science, College of Health Sciences, Eastern Kentucky University, Richmond, Kentucky.  
Undergraduate courses in Water Supplies & Wastewater Disposal, Water/Wastewater Lab and Environmental Epidemiology & Risk Assessment, Industrial & Occupational Toxicology, and Hazards & Diseases of Leisure. In the graduate program, Environmental Research Process, Capstone, and Biostatistics in Health Sciences.
- Sep 2011 – Aug 2012     **Visiting Scholar/Postdoctoral Research Fellow**, Division of Environmental Health Sciences, College of Public Health, Jiyong Lee Lab, The Ohio State University, Columbus, Ohio.  
Provided technical writing services and idea support for several grant applications to U.S. EPA (Extreme Events), and several other federal and state agencies on topics related to cyanobacteria in Lake Erie waters, viral indicators of recreational water quality, and more. Served as mentor for undergraduate student on project related to Mirror Lake and water quality during extreme event. Assisted others in the lab on laboratory methods and manuscripts related to fecal bacteria and antibiotic resistance genes in Ohio surface waters.
- Sep 2010 – Aug 2011     **Graduate Research Assistant**, Division of Environmental Health Science, College of Public Health, Jiyong Lee Lab, The Ohio State University, Columbus, Ohio.  
Served as project manager on U.S. EPA Great Lakes Restoration Initiative project pertaining to sanitary surveys and recreational water quality at four Lake Erie beaches in Northeast Ohio. Assisted in hiring and monitoring five summer undergraduate employees as well as managing sampling protocols for enabling molecular methods to be implemented to study fecal indicator bacteria, potential pathogens, as well as cyanobacteria. Assisted in developing a partnership with the Lake County Extension Office for providing space to carry out analyses and archiving samples. Provided additional support for manuscript preparation and further grant writing activities to the Ohio Lake Erie Commission and other agencies.
- Sep 2008 – Aug 2010     **Infectious Diseases Fellow**, Public Health Preparedness for Infectious Diseases, Office of the Provost/Academic Affairs, The Ohio State University, Columbus, Ohio.  
Carried out and coordinated a cohort study of >1,000 beachgoers at an inland Ohio lake in southwest Ohio. Analyzed results of the cohort study demonstrating linkages between fecal indicator bacteria and gastrointestinal illness. Developed and published manuscript in *Water Research*. Performed water quality assessments of seven inland Ohio lakes throughout southwest, central, and southeast Ohio with 26 visits to each
- Jul 2008 – Aug 2009     **Graduate Administrative Assistant**, Council of Graduate Students, Office of Student Life, The Ohio State University, Columbus, Ohio.  
Served as President of the Council of Graduate Students.
- Jul 2007 – Jul 2008     **Graduate Administrative Assistant**, Council of Graduate Students, Office of Student Life, The Ohio State University, Columbus, Ohio.  
Served as Vice-President of the Council of Graduate Students and Directed/Re-branded the 22<sup>nd</sup> Edward F. Hayes Graduate Research Forum.

- Sep 2006 – Jun 2007 **Graduate Research Assistant**, Division of Environmental Health Science, College of Public Health, The Ohio State University, Columbus, Ohio.  
 Provided general services to the entire Division. Assisted chair with research applications to the NIH for community-based participatory research in southeast Ohio pertaining to the Meigs County Cancer Coalition and air quality in the Ohio River Valley. Developed grant proposal pertaining to fish consumption for the Ohio River Sanitation Commission (ORSANCO). Assisted the chair with grant applications to the Ohio Environmental Education Council and Ohio EPA on water quality topics pertaining to Bokes Creek in Union County, Ohio. Developed pollutant concentration maps for chair using ArcGIS and U.S. EPA air toxics data at the census tract level. Assisted in moving laboratory equipment and supplies.
- Aug 2004 – May 2006 **Research Assistant**, Institute for Regional Analysis and Public Policy, Morehead State University, Morehead, Kentucky.  
 Provided field and laboratory evaluations for Shaw Environmental under a contract with U.S. EPA/ORD/NRMRL/WSWRD/WQMB/EWSL pertaining to a real-time biomonitor for water quality using *Corbicula fluminea* (Asiatic clams) and behavioral ecotoxicology. Also provided laboratory support to cell biology, ecology, limnology, and environmental testing courses in the Department of Biological and Environmental Sciences.

## CHRONOLOGY OF NON-ACADEMIC EMPLOYMENT

- Mar 2012 – Aug 2012 **ALB (Asian Longhorn Beetle) Survey Technician**, Division of Plant Health, Ohio Department of Agriculture, Amelia, Ohio.
- April 1999 – Mar 2012 **State Conservation Worker**, Division of Parks and Recreation, Ohio Department of Natural Resources, Bethel (Clermont Co.), Ohio
- Mar 2006 – Aug 2006 **State Conservation Worker (Creel Clerk/Creel Surveyor)**, Division of Wildlife, District #5, Ohio Department of Natural Resources, Xenia, Ohio.
- Jun 2005 – Aug 2005 **Student Trainee (Biology/Engineering Technician)**, Office of Research and Development, National Risk Management Research Laboratory, Water Supply/Water Resources Division, Water Quality Management Branch, Early Warning Systems Laboratory, U.S. Environmental Protection Agency, Cincinnati, Ohio
- Oct 2002 – May 2003 **Emergency Wildland Firefighter**, Division of Forestry, Kentucky Department of Natural Resources, Morehead, Kentucky.
- Dec 1999 – Jun 2001 **Assistant Corpsmember Leader**, Division of Civilian Conservation (Ohio CCC), Ohio Department of Natural Resources and AmeriCorps, MacArthur, Ohio.

## START-UPS

- Jan 2021 – Current **Founder & CEO**, Eastern Scientific, LLC, Richmond, Kentucky.

## HONORS AND AWARDS

- 2021 Global Health Innovation Prize, Unite for Sight, Global Health Innovation Conference
- 2021 Critical Reading Teacher of the Year, Eastern Kentucky University (2<sup>nd</sup> year of award)
- 2020 Past Presidents' Award, National Environmental Health Association
- 2020 Volunteer of the Year Award, Sigma Phi Epsilon Fraternity
- 2019 Critical Reading Teacher of the Year, Eastern Kentucky University (Inaugural award)
- 2018 President's Award for Excellence in Service, Assoc. of Environ. Health Acad. Programs
- 2018 Distinguished Educational Leader Award by the ECU Student Government Association
- 2017 Critical Thinking Teacher of the Year, Eastern Kentucky University

2016	Citation, House of Representatives of the Commonwealth of Kentucky
2015	Second Commission as Kentucky Colonel by the Commonwealth of Kentucky
2014	Inaugural Member, President's Leadership Action Academy at Eastern Kentucky
2012	Influential Eagle Recognition by Morehead State Univ. for 125 <sup>th</sup> Anniversary Celebration
2011	Larry M. Lewellen Award for Distinguished Service to OSU Graduate Student Body
2010	The Ohio State University, Board of Trustees Student Recognition Award Recipient
2009	Director's Achievement Award, Ohio DNR – Actions at Shawnee State Forest Wildfire
2009	Employee of the Quarter Award, Ohio DNR – Division of Parks and Recreation
2009	Spirit of Ohio State Award, The Ohio State University Student Leadership Awards
2009	Outstanding Graduate Student Award, Ohio State University, Student Leadership Awards
2008	Most Outstanding M.S./Ph.D. Student in OSU College of Public Health
2006	Most Outstanding Grad. Student in the Institute for Regional Analysis and Public Policy
2006	Most Outstanding Biology Graduate Student at Morehead State University
2005	Commissioned as a Kentucky Colonel by the Commonwealth of Kentucky
2004	Most Outstanding Graduate for Institute for Regional Analysis and Public Policy
2004	Most Outstanding Environmental Science Student at Morehead State University
2004	Who's Who Among America's Colleges and Universities
2004	Greek Man of the Year at Morehead State University
2003	Inducted into Phi Kappa Phi National Honors Society
2003	Inducted into Gamma Sigma Alpha Greek Honors Society
2003	Senior of the Year at Morehead State University
2003	Brotherhood Award from Morehead State University Interfraternity Council
2001	Most Outstanding Recreation and Wildlife Management Graduate at Hocking College
2001	Who's Who Among America's Junior Colleges

## PROFESSIONAL SERVICE

### Peer Reviewer

2021	Peer reviewer, <i>Heliyon</i>
2021	Peer reviewer, <i>Energies</i>
2020	Reviewer Board, <i>International Journal of Environmental Research and Public Health</i>
2020	Peer reviewer, <i>Scientific Reports</i>
2020	Panelist, NIH/NIEHS Special Emphasis Panel, COVID-19, ZES1 JAB-K (TS)
2020	Panelist, NIH/NIEHS Special Emphasis Panel, COVID-19, ZES1 JAB-S (TS)
2020	Panelist, NIH/NIEHS Special Emphasis Panel, COVID-19, ZES1 JAB-D (TS) A
2020	Panelist, NIH/NIEHS Special Emphasis Panel, Study Section ZES1 JAB-D (HH)
2019	Peer reviewer, <i>Preventive Medicine</i>
2019 – Current	Peer reviewer, <i>Water</i>
2019	Peer reviewer, <i>Journal of Rural Health</i>
2018	Peer reviewer, <i>Environmental Science &amp; Technology Letters</i>
2018	Peer reviewer, <i>Harmful Algae</i>
2018 – Current	Peer reviewer, <i>Toxics</i>
2017 – 2018	Peer reviewer, <i>Toxins</i>
2017 – 2018	Peer reviewer, <i>Epidemiology &amp; Infection</i>
2017	Peer reviewer, <i>Science of the Total Environment</i>
2017	Peer reviewer, <i>International Food Research Journal</i>
2017	Peer reviewer, One Health   One Global Environment Conference Abstracts
2016 – 2017, 2020	Peer reviewer, <i>Journal of Water and Health</i>
2016 – 2017	Peer reviewer, <i>Ecological Engineering</i>
2016	Peer reviewer, APHA Environment Section Abstract
2015	Peer reviewer, Eastern Research Group under federal contract
2015, 2017 – 2018	Peer reviewer, <i>Water Research</i>

2015	Peer reviewer, <i>Beverages</i>
2014	Peer reviewer, <i>Journal of Great Lakes Research</i>
2014	Peer reviewer, International Society of Exposure Science Conference Abstracts
2012 – Current	Peer reviewer, <i>International Journal of Environmental Research and Public Health</i>

### **Leadership & Other Service in the Profession**

2020 – Current	Member, National Environmental Health Association Board Nominating Committee
2019 – Current	Technical Advisor for Global Health, National Environmental Health Association
2019	Career Panelist for American Public Health Association – Environment Section
2019	Moderator, Occ. Health & Safety Session Moderator, IFEH Acad. Conf., Uganda
2020 – 2021	Vice Chair, Kentucky Board of Certification of Drinking Water Operators
2018 – Current	Board Member, Kentucky Board of Certification of Wastewater Operators
2018 – Current	Board Member, Kentucky Board of Certification of Drinking Water Operators
2018 – 2019	Abstract reviewer, Int'l Fed. of Env. Health Acad. Conference, Makerere Univ., Uganda
2016 – Current	Co-Chair, One Health   One Global Environment Conference, Montego Bay, Jamaica
2016 – 2018	President & Past-President, Association of Environmental Health Academic Programs
2017	Chair, Technical Advisory Committee, One Health   One Global Env. Conference
2017	Moderator, General Environmental Health Section, NEHA Annual Ed. Conference
2017 – Current	Subject Matter Expert, Water Quality, National Environmental Health Association
2017 – Current	Membership Representative, National Environmental Health Association
2016	Moderator, APHA Epidemiology Section, Affordable Care Act Session, APHA Meeting
2016 – Current	Member, National Committee on Diversity in Environmental Health
2015 – 2016	President-Elect, Association of Env Health Academic Programs Board of Directors
2015 – 2016	Peer mentor, Association of Env Health Academic Programs to Oakland University
2014 – 2019	Technical Advisor for Risk Assessment, National Environmental Health Association
2014	Moderator, 'Environmental Epidemiology' Session, APHA Annual Meeting
2014	Session Chair, 'Exposure to Recreational Water Contaminants', ISES Annual Mtg.
2013 – Current	Member, Technical Advisory Cmte, KY Environmental Public Health Tracking Network
2013 – 2018	Member, Association of Environmental Health Academic Programs Board of Directors
2013 – 2014	Member, Technical Organizing Cmte, Int'l Society of Exposure Science (ISES) Meeting
2013 – 2014	Reviewer, NSF International, EHS Internship Award Committee

### **Professional Society Affiliations**

2016 – Present	Member, American Association for the Advancement of Science (AAAS)
2013 – Present	Member, National Environmental Health Association
2013 – Present	Member, Kentucky Association of Milk, Food, and Environmental Sanitarians
2013 – Present	Member, American Public Health Association
2012 – Present	Member, Kentucky Academy of Science
2010 – 2012	Member, American Society of Microbiology
2010 – 2011	Member, Water Management Association of Ohio
2005, 2010, 2018	Member, Ohio River Basin Consortium for Research & Education
2006 – 2008	Member, Appalachian Studies Association

## **UNIVERSITY SERVICE**

### **Eastern Kentucky University**

2021 – Current	Secretary, Eastern Kentucky University Board of Regents
2020 – Current	Member, Eastern Kentucky University COVID-19 Task Force & Testing Subcommittee
2020	Co-Chair, Presidential Search, Eastern Kentucky University
2020 – 2021	Member, ECU General Education Implementation Team
2019 – 2020	U.S. Census Bureau's Complete Count Committee for Eastern Kentucky University
2019 – Current	Faculty Regent, Eastern Kentucky University Board of Regents
2019 – Current	Co-Chair, Regents Cmte. on Org. Performance, Enrollment Growth & Student Success
2019 – Current	Member, ECU Data Science Advisory Committee
2018	Member, No Prob (Probation) Team for ECU Office of Retention & Graduation
2016 – 2019	Advisor, Student Senate and Advisory Board Member for Student Govt Assoc.
2016 – 2019	Member, Student Government Association Advisory Board
2016 – 2019	Subcommittee Chair, Campus Water & Stormwater Committee

2016 – Current Chautauqua Lecture Series Advisory Committee  
 2016 Mentor, Shaping our Appalachian Region - MIT Appalachian Health Hack-a-thon  
 2016 Member, Board of Regents Ad-Hoc Faculty Workload/Reassign Time Committee  
 2016 Member, Service Learning/Community-Based Learning Task Force  
 2015 – 2018 Chair/Director, EKU Tobacco-Free/Vape-Free Campus Program  
 2014 – Current Fair Director, Kentucky Science and Engineering Fair (State Science Fair)  
 2014 – 2020 Member, International Education Committee  
 2014 – 2018 Member, Campus Responsible Environmental Stewardship (CRES) Committee  
 2015 – Current Member, Financial Aid & Scholarships Appeals Committee  
 2015 Member, Academic Engagement/Service Learning Task Force  
 2015 Member, University Strategic Planning Team (Regional Focus Strat. Planning Team)  
 2013 – Current Member, Kentucky Science and Engineering Fair Board  
 2013 – Current Member, Technical Advisory Committee, KY Env. Public Health Tracking Network  
 2013 – Current Member, Eastern Kentucky University STEM-H Committee  
 2013 – 2019 Member, EKU Tobacco-Free Task Force  
 2013 – Current Member, EKU Natural Areas Advisory Board & Research Committee  
 2012 – 2015 Member, Health Sciences Learning Resource Center Advisory Committee

### **The Ohio State University**

2019 – Current At-Large Member, The Ohio State University College of Public Health Alumni Society  
 2017 – 2019 Secretary, The Ohio State University College of Public Health Alumni Society  
 2011 Chair, OSU Undergraduate Student Trustee Selection Committee  
 2010 – 2011 Member, OSU Faculty Cabinet  
 2010 – 2011 Chair, University Senate Cmte on Graduate Associate Benefits and Compensation  
 2009 – 2010 Ex-Officio Member, Graduate/Professional Student Trustee Selection Committee  
 2008 – 2011 Member, Efficiency and Effectiveness Council, University System of Ohio  
 2008 – 2010 Graduate/Professional Student Trustee, The Ohio State University Board of Trustees  
 2009 – 2010 Member, OSU Board of Trustees Committee on Fiscal Affairs  
 2008 – 2009 Member, Student Activity Fee Review Committee  
 2008 – 2010 Member, OSU Board of Trustees Committee on Trusteeship  
 2008 – 2010 Member, OSU Board of Trustees Committee on Agricultural Affairs  
 2008 – 2009 Member, OSU Board of Trustees Committee on Academic Affairs and Student Life  
 2008 – 2009 President, OSU Council of Graduate Students  
 2008 Member, OSU Counseling and Consultation Services Program Review Committee  
 2007 – 2008 Vice President, Ohio State University Council of Graduate Students  
 2007 – 2008 Forum Director, 22<sup>nd</sup> Edward F. Hayes Graduate Research Forum  
 2007 – 2008 Chair, Organizations and Elections Committee for OSU Council of Graduate Students  
 2007 – 2009 Member, Ohio State University Council on Student Affairs  
 2007 – 2008 Member, Ohio State University Athletic Council  
 2007 – 2008 Member, OSU Athletic Council's Academic Progress and Eligibility Committee  
 2007 – 2008 Member, OSU Athletic Council's Finance and Facilities Committee  
 2007 – 2008 Member, OSU Athletic Council's Equity and Student Welfare Committee  
 2007 – 2008 Member, Targeted Investments in Excellence Food Sciences Faculty Search Cmte.  
 2007 – 2008 Member, TIE Environmental Health Sciences Faculty Search Committee  
 2006 – 2007 Member, OSU University Senate Legislative/Government Affairs Committee  
 2006 – 2007 Chair, OSU Council of Graduate Students Governmental Relations Committee

### **Morehead State University**

2018 – 2020 President, Morehead State University Alumni Association  
 2015 – 2018 President-Elect, Morehead State University Alumni Association  
 2014 – Current Member, Morehead State University Alumni Association Board of Directors  
 2005 – 2006 Chair, Kentucky Board of Student Body Presidents  
 2005 – 2006 Member, President's Council at Morehead State University  
 2005 – 2006 Member, Strategic Enrollment Management Task Force at Morehead State University  
 2005 – 2006 Subcommittee Chair and Member, Morehead State University Planning Committee  
 2005 – 2006 Member, Morehead State University Founder's Day Committee  
 2005 – 2006 Member, Morehead State University Graduate Curriculum Committee

2005 – 2006	Co-Chair and Member, University Processes/Internal Communication Committee
2005	Chair, Sport Project Reorganization and Transitioning Committee (Recreation Center)
2005	Member, Morehead State University Dean of Students Search Committee
2005	Member, Morehead State University Distinguished Teacher Award Selection Cmte.
2004 – 2006	President, Morehead State University Student Government Association
2004 – 2006	Student Regent, Morehead State University Board of Regents
2004 – 2006	Member, Morehead State University Alumni Association Board of Directors
2004 – 2006	Member, Morehead – Rowan County Area Chamber of Commerce
2004 – 2006	Member, Morehead State University Undergraduate Curriculum Committee
2004 – 2006	<i>Ex-Officio</i> Member, Morehead State University Faculty Senate
2004 – 2006	Member, Morehead State University Alcohol and Other Drug Task Force/UNITE
2004 – 2006	Member, Morehead State University Library Committee
2004 – 2005	Member, Morehead State University Civic Engagement Committee
2004 – 2005	Member, MSU Campus Environment and Affirmative Action Team
2004 – 2005	Member, Morehead State University Academic Programs Review Committee
2004	Member, Morehead State University Presidential Search Committee

### **External Service**

2021	Chair, NAACP Richmond-Madison County Branch Public Relations Committee
2020 – Current	Member, NAACP Richmond-Madison County Branch, Elections Committee
2020 – Current	Member, NAACP Richmond-Madison County Branch, Environmental Justice Cmte.
2019 – Current	President, MSU Sigma Phi Epsilon Alumni Volunteer Corporation
2018 – 2019	Secretary, MSU Sigma Phi Epsilon Alumni Volunteer Corporation
2013 – 2017	President, MSU Sigma Phi Epsilon Alumni Volunteer Corporation
2011 – Current	Member, MSU Sigma Phi Epsilon Alumni Volunteer Corporation
2002 – Current	Brother Mentor and Life Member, Sigma Phi Epsilon Fraternity
2007	Chair, Ohio Civil Service Employees Association, Chapter 3100 Elections Committee

### **SCHOLARSHIP**

#### **Peer-Reviewed Publications**

1. T. Gerding, D. Stephenson, and **J.W. Marion**. 2021. Carbon monoxide exposure potential associated with the use of recreational watercraft. *Journal of Environmental Health* (In Press, July 2021).
2. **J.W. Marion**, A. Strand, and E. Baldrige. 2021. Changes in student behaviors and policy opinion regarding E-cigarettes at a Kentucky University. *Preventive Medicine Reports* 22:101364.
3. S.E. Hughes and **J.W. Marion**. 2021. Cyanobacteria growth in nitrogen- & phosphorus-spiked water from a hypereutrophic reservoir in Kentucky, USA. *Journal of Environmental Protection* 12(2):75-89.
4. T. Gerding, T. Wilder, and **J.W. Marion**. 2020. An assessment of disinfection-related water chemistry at public pools and spas in Louisville, Kentucky. *Journal of Environmental Health* 83(1):18-24.
5. A. Kosgey, A. Shitandi and **J.W. Marion**. 2018. Antibiotic residues in milk from popular Kenyan milk ATMs. *American Journal of Tropical Medicine and Hygiene* 98(5):1520-1522.
6. **J.W. Marion**, J. Lee, J. Rosenblum, and T.J Buckley. 2018. Assessment of temperature and ultraviolet radiation effects on sunburn at an inland U.S. Beach: a cohort study. *Environmental Research* 161:479-484.
7. **J.W. Marion**, F. Zhang, and J. Lee. 2017. Associations between county-level land cover classes and cyanobacteria blooms in the United States. *Ecological Engineering* 108B:556-563.
8. J. Lee, K.H. Tseng, F. Zhang, C. Lee, **J.W. Marion**, S. Liang, and C.K. Shum. 2015. From satellite to genes: an integrative approach for timely monitoring of harmful cyanobacteria in Lake Erie beach waters. *Journal of Environmental Pollution and Human Health* 3(3):70-79.
9. C. Lee, **J.W. Marion**, M. Cheung, C.S. Lee, and J. Lee. 2015. Associations among human-associated fecal contamination, *Microcystis aeruginosa*, and microcystin at Lake Erie beaches. *International Journal of Environmental Research and Public Health* 12(9):11466-11485.
10. **J.W. Marion**, V. Burrowes, C.S. Lee and J. Lee. 2015. Changes in bacteriological water quality associated with an extreme recreational water event in Ohio, United States. *Water Quality, Exposure and Health* 7(4):491-501.

11. **J.W. Marion**, C.H. Lee, C.S. Lee, S. Lemeshow, T.J. Buckley, Q. Wang, L. Saif, and J. Lee. **2014**. Integrating bacterial and viral water quality assessment potentially enhances swimming-associated illness prediction at a freshwater beach. *PLoS ONE* 9(11):e112029. doi: 10.1371/journal.pone.0112029
12. C.S. Lee, C. Lee, **J.W. Marion**, Q. Wang, L. Saif, and J. Lee. **2014**. Occurrence of Human Enteric Viruses at Freshwater Beaches during Swimming Season and Its link to Water Inflow. *Science of the Total Environment* 472:757-766.
13. C. Lee, **J.W. Marion**, and J. Lee. **2013**. Development and application of a quantitative PCR assay targeting *Catellibacterium marimammalium* for assessing gull-specific fecal contamination at Lake Erie beaches. *Science of the Total Environment*. 454-455:1-8.
14. C.H. Lee, S. Agidi, **J.W. Marion**, and J. Lee. **2012**. *Arcobacter* in Lake Erie beach waters: an emerging gastrointestinal pathogen linked with human-associated fecal contamination. *Applied and Environmental Microbiology* 78(16):5511-5519.
15. **J.W. Marion**, J. Lee, C.H. Lee, J.R. Wilkins, III, S. Lemeshow, E. Waletzko and T.J. Buckley. **2011**. *In vivo* phycocyanin fluorometry as a rapid screening tool for predicting elevated microcystin concentrations at eutrophic lakes. *Environmental Science and Technology* 46(8):4523-4531
16. C.S. Lee, **J.W. Marion** and J. Lee. **2011**. A novel genetic marker for the rapid detection of *Bacteroides fragilis* in recreation water as a human-specific fecal indicator. *Journal of Water and Health* 9(2):253-264.
17. **J.W. Marion**, J. Lee, S. Lemeshow and T.J. Buckley. **2010**. Association of gastrointestinal illness and recreational water exposure at an inland U.S. beach. *Water Research* 44:4796-4804.

#### **Invited Journal Publications**

1. C. Pinion Jr., L. Mitchell, and **J.W. Marion**. **2018**. It's about communities: the commitment to promoting a culturally competent environmental health workforce. *Journal of Environmental Health* 81(2):36-39.
2. **J.W. Marion**, H. Scarlett, P. Oliver, and N.E. Campbell. **2018**. The environmental health profession makes strong entry into the global "One Health" framework in Montego Bay, Jamaica. *Journal of Environmental Health* 80(8):40-41.
3. **J.W. Marion**, A.M. Zimeri, and T.J. Murphy. **2017**. Trends in the environmental health job market for new graduates of EHAC accredited programs. *Journal of Environmental Health* 80(2):32-36.
4. C.D. Treser, and **J.W. Marion**. **2017**. Students can be an important link between academia and practice. *Journal of Environmental Health* 79(7):36-37.
5. J.W. Marion, and T.J. Murphy. **2016**. A fork in the road for environmental health workforce development and U.S. Public Health. *Journal of Environmental Health* 79(2):40-43.
6. **J.W. Marion**, and Y. Sinde. **2015**. The need for environmental public health professionals and the role of EHAC-accredited programs in increasing the pool. *Journal of Environmental Health* 78(2):36-41.

#### **Patent and Patent Cooperation Treaty (PCT) Applications**

1. **J.W. Marion**. Provisional Patent Application No. 62/979,694. Method for detection of *E. coli* and antibiotic resistant bacteria in water. Filed for Consideration: February 24, 2020.
2. **J.W. Marion**. PCT Application No. 62/979,694. Method for detection of *E. coli* and antibiotic resistant bacteria in water. Filed for Consideration: February 18, 2021.

#### **Manuscripts in Progress (\*Indicates EKU student)**

1. **J.W. Marion**, B. Cheruiyot\*, P. Sigilai\*, A. Ronnoh\*, and A. Maritim\*. Quantifiable public health benefits associated with various drinking water disinfection methods. (To be submitted)
2. C. Gibson\*, and **J.W. Marion**. Evaluation of a simple field-based method for quantification of *E. coli* in water in remote settings. (To be submitted)
3. S. Craft\*, and J.W. Marion. Effectiveness of a point-of-use home ozone generator for reducing *E. coli* in contaminated surface water. (To be submitted)
4. **J.W. Marion**. Heavy metals and health effects associated with Appalachian private water systems. (To be submitted)

## Book Publications

1. **J.W. Marion. 2013.** Talkin' trash: an introduction to solid and hazardous waste management. In Beck, J. (Ed.) *Introduction to environmental health science* (p. 378). Dubuque, IA: Kendall-Hunt.

## Oral Presentations (\*Indicates EKU Student)

1. **J.W. Marion.** 2019. The impact of water aesthetics and safety perceptions on water consumption by Appalachian Kentuckians. National Environmental Health Association Annual Education Conference & Exhibition, July 11, 2019. Nashville, Tennessee.
2. A. Kosgey\*, A. Shitandi, and **J.W. Marion.** 2019. An assessment of antibiotic residues in milk from milk ATMs, street vendors, and commercial samples in Eldoret, Kenya. 3<sup>rd</sup> International Federation of Environmental Health World Academic Conference and 16<sup>th</sup> Annual Makerere University Environmental Health Student (Association Scientific Conference, April 9, 2019, Kampala, Uganda.
3. A. Kosgey\*, A. Shitandi, and **J.W. Marion.** 2018. Antibiotic misuse and intervention opportunities in Kenya: a case study on emergent and popular milk vending machines. American Public Health Association Annual Meeting, November 12, 2018. San Diego, California.
4. S. Hughes\*, and **J.W. Marion.** 2018. A tale of two nutrients: the role of N & P in promoting cyanobacteria growth in a hypereutrophic Central Kentucky lake. Ohio River Basin Consortium for Education and Research (ORBCRE) Annual Symposium, October 18-19, 2018. Crestview Hills, Kentucky.
5. **J.W. Marion.** 2018. Cyanobacteria 101: Who, What, Where, and How? National Environmental Health Association Annual Educational Conference & Exhibition, June 27, 2018. Anaheim, California.
6. C. Gibson\*, and **J.W. Marion.** 2017. Evaluation of a simple field-based method for quantification of *E. coli* in water. American Public Health Association 145<sup>th</sup> Annual Meeting, November 7, 2017. Atlanta, Georgia.
7. A. Kosgey\*, and **J.W. Marion.** 2017. Evaluation of antibiotic residues in milk from Kenyan milk ATMs. One Health | One Global Environment Conference, October 25, 2017. Montego Bay, Jamaica.
8. S. Craft\*, and **J.W. Marion** 2017. Effectiveness of a lightweight home ozone generator for reducing *E. coli* in surface water. National Environmental Health Association 81<sup>st</sup> Annual Education Conference, July 12, 2017. Grand Rapids, Michigan.
9. A. Kosgey\*, and **J.W. Marion.** 2017. Evaluation of antibiotic residues in milk from Kenyan milk ATMs. National Environmental Health Association 81<sup>st</sup> Annual Education Conference, July 10 – 13, 2017. Grand Rapids, Michigan. \*\*Student Research Competition Winner
10. A. Maritim\*, A. Ronnoh\*, and J.W. Marion. 2017. Household water treatment effects on total coliform and *E. coli* densities at Uasin Gishu County, Kenya. National Environmental Health Association 81<sup>st</sup> Annual Education Conference, July 10 – 13, 2017. Grand Rapids, Michigan. \*\*Student Research Competition Winner
11. A. Kosgey\*, and **J.W. Marion.** 2017. Evaluation of antibiotic residues in milk from Kenyan milk ATMs. 3<sup>rd</sup> EKU College of Health Sciences Scholars Day, April 18, Richmond, Kentucky. \*\*Graduate EHS/MPH Student Research Competition Winner
12. S. Petz\*, C. Schwab\*, **J.W. Marion**, and C. Pinon. 2017. The relationship between excess nutrients and cyanobacteria in Lake Reba. 3<sup>rd</sup> EKU College of Health Sciences Scholars Day, April 18, Richmond, Kentucky. \*\*Undergraduate EHS Student Research Competition Winner
13. **J.W. Marion.** 2016. Potential for corrosive water and elevated lead in private drinking water systems: a case study from Eastern Kentucky. American Public Health Association 144<sup>th</sup> Annual Meeting, October 29 – November 2, 2016, Denver, Colorado.
14. **J.W. Marion.** 2016. Potential public health benefits associated with large-scale restoration of wetlands. 5<sup>th</sup> International EcoSummit, August 29 – September 1, 2016, Montpellier, France.
15. S. Campbell and **J.W. Marion.** 2016. Global citizenship preparedness at Eastern Kentucky University and its benchmark learning institutions: assessing undergraduate growth and social awareness. EKU Honors Program, April 14, 2016, Richmond, KY
16. C. Graves\*, A. Porter\*, and **J.W. Marion.** Evaluation of a water purification system in Haiti. 2015. Global Environmental Health Faculty Forum, September 23, Coimbra, Portugal.

17. **J. W. Marion**, P. Sigilai\*, and B. Cheruiyot\*. **2015** From Kentucky to Kenya: How international students returned home and quantified health benefits associated with water disinfection strategies. Global Environmental Health Faculty Forum, September 23, Coimbra, Portugal.
18. **J.W. Marion**. **2015**. Heavy metals and health effects associated with Appalachia's private water systems. Interstate Environmental Health Seminar. July 30, Cumberland Falls (Corbin), Kentucky.
19. C. Graves\*, A. Porter\*, and **J.W. Marion**. Testing of a water purification system in Haiti. **2015**. EKU College of Health Sciences, April 30, Richmond, Kentucky.
20. E. Kurgat\* and **J.W. Marion**. **2015**. Can we get *E. coli* results faster from tryptophan fluorometry? **2015**. National Environmental Health Association Annual Education Conference, July 13-15, Orlando, Florida.
21. **J.W. Marion**. **2015**. Cyanobacteria 101: Introduction to Cyanotoxic Blooms at Regional Lakes. Kentucky Association of Milk, Food, and Environmental Sanitarians Educational Conference, February 12, Lexington, Kentucky.
22. **J.W. Marion**, A. Kittoe\*, B. Cheruiyot\*, P. Sigilai\*, J. Ruehl\*, and T. Owens\*. **2014**. Evaluation of heavy metal exposure and health among Appalachian groundwater users. Kentucky Engagement Conference, 19 November. Morehead, Kentucky.
23. S. Moore\*, and **J.W. Marion**. Evaluating cyanobacteria concentrations in selected central Kentucky lakes. **2014**. 100<sup>th</sup> Kentucky Academy of Science Annual Meeting, Lexington, KY, November.
24. C. Graves\*, A. Porter\*, and **J.W. Marion**. Testing of a water purification system in Haiti. **2014**. 100<sup>th</sup> Kentucky Academy of Science Annual Meeting, Lexington, KY, November.
25. **J.W. Marion**, J. Lee, C.H. Lee, J.R. Wilkins, III, S. Lemeshow, E. Waletzko and T.J. Buckley. Rapid Phycocyanin Fluorometry Predicts Elevated Microcystin Levels in Eutrophic Ohio Lakes. **2014**. International Society of Exposure Science Meeting, Cincinnati, OH, October.
26. **J. W. Marion**, P. Sigilai\*, and B. Cheruiyot\*. Quantifiable public health benefits associated with drinking water disinfection. **2014**. International Federation of Environmental Health World Congress & National Environmental Health Association Annual Education Conference Joint Meeting, Las Vegas, NV, July.
27. B. Cheruiyot\*, P. Sigilai\*, and **J.W. Marion**. Water treatment practices prevent gastrointestinal illness in Western Kenya. **2013**. Kentucky Academy of Science, 99<sup>th</sup> Annual Meeting, Morehead, KY, November. (\*Indicates Mentored Students); 2<sup>nd</sup> Place Winner in Health Sciences Graduate Competition
28. **J. W. Marion**, P. Sigilai\*, and B. Cheruiyot\*. Quantifiable public health benefits associated with drinking water disinfection. **2013**. American Public Health Association, 141<sup>st</sup> Annual Meeting, Boston, MA, November.
29. **J.W. Marion**, C. Lee, C-S. Lee, S. Lemeshow, T.J. Buckley, and Lee. Integrative health risks associated with recreational water exposure to viral and bacterial contaminants. **2013**. American Public Health Association, 141<sup>st</sup> Annual Meeting, Boston, MA, November.
30. **J.W. Marion**, J. Lee, S. Lemeshow, J.R. Wilkins, III, and T.J. Buckley. *E. coli* densities are associated with gastrointestinal illness among recreational water users at an inland beach. **2012**. Kentucky Academy of Sciences. 98<sup>th</sup> Annual Meeting, Richmond, KY, October.
31. J. Lee, **J.W. Marion**, C.S. Lee, C.H. Lee, and T.J. Buckley. Comparing Swimming-Related Illness Associations with Fecal Indicators Quantified by qPCR and Culture-based Methods at a Freshwater Beach. **2011**. U.S. EPA National Beach Conference, March 15-17.
32. **J.W. Marion**, J. Lee and T.J. Buckley. Storms and Total Phosphorus: Practical and Rapid Predictors of Advisory Conditions at Inland Ohio Beaches. **2010**. Water Management Association of Ohio 2010 Conference, November 17-18. Columbus, Ohio.
33. **J.W. Marion**, J. Lee, T.J. Buckley, J. Rosenblum, P. Chiang, M.J. Lofton, S. Zolinski, K. Wetzel and M. Farley. Association of Illness and Recreational Water Exposure During Non-Advisory conditions at an Inland U.S. Beach. **2010**. The Water Research Conference, International Water Association, April 11-14. Lisbon, Portugal.
34. **J.W. Marion** and S. Ganguly. **2006**. Geographic and Temporal Factors Affecting College Degree Attainment in Seven Appalachian States. 12<sup>th</sup> Biennial Conference on Appalachian Geography. March 17. Pipestem, WV.
35. **J.W. Marion**. Geographic and Temporal Factors Affecting College Degree Attainment in Seven Appalachian States. **2006**. Appalachian Studies Conference. March 18. Dayton, OH.

36. **J.W. Marion**, J.P. Kilroy, T. Torrence, J. Wiggington and A. Harris. *A comparison of environmental attitudes and perceptions in two Kentucky Counties*. **2003**. Appalachian Regional Commission's Appalachian Teaching Project Conference. November 15-16. Washington, D.C.

**Poster Presentations** (\*Indicates EKU Student)

1. **J.W. Marion**, E. Baldrige, and A. Strand. 2019. Changes in student behaviors and attitudes regarding e-cigarettes and related policies at a Kentucky University from 2014 to 2018. American Public Health Association, November 2 – November 6, 2019. Philadelphia, Pennsylvania.
2. **J.W. Marion**, and M.K. Richardson. 2019. Assessment of MRSA nasal carriage among Kentucky cattle workers. American Public Health Association, November 2 – November 6, 2019. Philadelphia, Pennsylvania.
3. M. Shenkel\*, L.J. Larkin, J.M. Larkin, and **J.W. Marion**. **2018**. Grip strength as a measure of fitness: a correlation of grip strength, overweight and obese college students. ECU College of Health Sciences 4<sup>th</sup> Annual Scholars Day, April 24, 2018. Richmond, Kentucky.
4. A. Front\*, and **J.W. Marion**. 2018. Antibiotic resistance in heterotrophic bacteria at two Kentucky wastewater plants. ECU University Fellows Showcase, April 12, 2018. Richmond, Kentucky.
5. A. Kosgey\*, and **J.W. Marion**. **2017** (Oral & Poster Presenter). Evaluation of antibiotic residues in milk from Kenyan milk ATMs. National Environmental Health Association 81<sup>st</sup> Annual Education Conference, July 10 – 13, 2017. Grand Rapids, Michigan. \*\*Student Research Competition Winner
6. A. Maritim\*, A. Ronnoh\*, and J.W. Marion. **2017** (Oral & Poster Presenter). Household water treatment effects on total coliform and *E. coli* densities at Uasin Gishu County, Kenya. National Environmental Health Association 81<sup>st</sup> Annual Education Conference, July 10 – 13, 2017. Grand Rapids, Michigan. \*\*Student Research Competition Winner
7. E. Kurgat\*, **J.W. Marion**, and M. Verhougstraete. **2017**. Can we get *E. coli* results faster with tryptophan fluorometry. UNC Water Microbiology Conference / 19<sup>th</sup> Annual International Symposium on Health-Related Water Microbiology. Chapel Hill, North Carolina. May 15 – 19, 2017.
8. S. Petz\*, C. Schwabb\*, C. Pinion, and **J.W. Marion**. **2017**. The Relationship Between Excess Nutrients and Cyanobacteria in Lake Reba. (Undergraduate winning poster). ECU College of Health Sciences Scholars Day, April 18, 2017.
9. A. Kosgey\*, and **J.W. Marion**. **2017**. Evaluation of antibiotic residues in milk from Kenyan milk ATMs. (Graduate winning poster). ECU College of Health Sciences Scholars Day, April 18, 2017.
10. A. Broaddus, L.J. Larkin, C. Miller, **J.W. Marion**, K. Brewer, and L. Schwartz. **2017**. Perceived barriers among local health departments implementing a syringe exchange program in Kentucky. ECU College of Health Sciences Scholars Day, April 18, 2017.
11. W. Strait III\*, and **J.W. Marion**. **2017**. Can hemp media filter *E. coli* better than current water filtering media?. Kentucky Public Health Association Annual Meeting. (Building Epidemiological Capacity in Kentucky [BECKY] Award Winner) March 11 -13, 2017.
12. A. Broaddus, L.J. Larkin, C. Miller, **J.W. Marion**, K. Brewer, and L. Schwartz. **2017**. Perceived barriers among local health departments implementing a syringe exchange program in Kentucky. Kentucky Public Health Association Annual Meeting. March 11 -13, 2017.
13. Ronnoh\*, A. Maritim\*, J.P. Klyza, and **J.W. Marion**. **2016**. Effectiveness of household treatment methods on drinking water in Western Kenya. ECU College of Health Sciences Scholars Day, April 19, 2016
14. M. Leece\*, A. Maritim\*, J. Kendrick\*, and **J.W. Marion**. **2016**. Direct natural sunlight for disinfecting water from Copper Creek in Rockcastle County, Kentucky. ECU College of Health Sciences Scholars Day, April 19, 2016
15. J. Hisel, J.P. Klyza, and **J.W. Marion**. **2016**. Prevalence of herpes simplex virus (HSV-1) in individuals with Alzheimer's disease. ECU College of Health Sciences Scholars Day, April 19, 2016
16. **J.W. Marion**. 2016. Heavy metals and health effects associated with Appalachia's private water systems. Lilley Cornett Woods. June 7, **2016**, Lilley Cornett Woods, Hallie, Kentucky.
17. Strand\*, and **J.W. Marion**. **2015**. Student attitudes and perceptions about e-cigarettes and a tobacco-free campus policy at a Kentucky University. American Public Health Association 143<sup>rd</sup> Annual Meeting. November 2, Chicago, IL.
18. M. Jones\*, and **J.W. Marion**. **2015**. An assessment of fecal contamination in well water in Southern Niger, Africa. Global Environmental Health Faculty Forum, September 24, Coimbra, Portugal.

19. C. Graves\*, A. Porter\*, and **J.W. Marion**. Testing of a water purification system in Haiti. **2015**. ECU College of Health Sciences, April 30, Richmond, Kentucky.
20. M. Jones\*, and **J.W. Marion**. An assessment of fecal contamination in well water in Southern Niger, Africa. **2015**. ECU College of Health Sciences, April 30, Richmond, Kentucky.
21. E. Kurgat and **J.W. Marion**. Can we get *E. coli* results faster from tryptophan fluorometry? **2015**. University Presentation Showcase, Graduate Division, April 17, Richmond, Kentucky (**Top Poster Winner**)
22. C. Graves\*, A. Porter\*, and **J.W. Marion**. Testing of a water purification system in Haiti. **2015**. University Presentation Undergraduate Division, April 17, Richmond, Kentucky. (**Runner-Up Poster Winner**).
23. **J.W. Marion**, F. Richardson\*, J. Lee, and T.J. Buckley. Linking environmental exposures and sunburn incidence among beach users at East Fork Lake, Ohio, USA. **2014**. American Public Health Association, 142<sup>nd</sup> meeting. November 15 – 19. New Orleans, LA.
24. **J.W. Marion**, A. Kittoe\*, B. Cheruiyot\*, P. Sigilai\*, J. Ruehl\*, and T. Owens\*. Evaluation of heavy metal exposure and health among Appalachian groundwater users. **2014**. American Public Health Association, 142<sup>nd</sup> meeting. November 15 – 19. New Orleans, LA.
25. M. Holmes\*, H. Ward\*, B. Johnson\*, **J.W. Marion\***, and B. Staddon. Incidence of Antibiotic Resistance Genes in Well Water from Southeastern Kentucky. **2014**. 100<sup>th</sup> Kentucky Academy of Science Annual Meeting, Lexington, KY, November.
26. M. Holmes\*, H. Ward\*, and B. Johnson\* (Mentors: B. Staddon and **J. Marion**). Incidence of Antibiotic Resistance Genes and Human Fecal Bacteria in Well Water. **2014**. ECU Undergraduate Showcase. Richmond, KY. April.
27. H. Ward\* (Mentors: B. Staddon and **J. Marion**). Incidence of Antibiotic Resistance Genes and Human Fecal Bacteria in Well Water. **2014**. Posters at the Capitol. Frankfort, KY. February.
28. C. Lee, **J. Marion** and J. Lee. The potential association between toxin-producing Cyanobacteria and fecal contamination in Lake Erie beaches beach waters. American Society for Microbiology. **2012**. 112<sup>th</sup> General Meeting, San Francisco, June.
29. J. Lee, **J. Marion**, C.S. Lee and T.J. Buckley. Integrative health risks measured with multiple genetic markers in Ohio inland beaches. **2011**. National Environmental Health Association Meeting. Columbus, OH. June.
30. V. Burrowes, **J. Marion**, C.S. Lee, and J. Lee. Intense human impact on microbial contamination during the Ohio State University annual Mirror Lake Jump 2010. **2011**. American Society of Microbiology 111<sup>th</sup> General Meeting, New Orleans, May.
31. **J. Marion**, J. Lee and T. J. Buckley. Reservoir inflows and total phosphorus: practical and rapid predictors of *E. coli* densities at inland Ohio beaches. **2011**. American Society of Microbiology 111<sup>th</sup> General Meeting, May. New Orleans, LA.
32. J. Lee, C. Lee, and **J. Marion**. **2011**. Identifying major fecal contamination sources using multiple genetic markers at Lake Erie beaches. American Society of Microbiology 111<sup>th</sup> General Meeting, May, New Orleans.
33. **J.W. Marion**, J. Lee, and T.J. Buckley. Should I Keep my *E. coli* Plates? **2011**. A Practical and Rapid Approach to Estimate *E. coli* Densities at Inland Ohio Beaches. U.S. EPA National Beach Conference, March 15-17. Miami, FL.
34. J. Lee, C. Lee, **J. Marion**, F. Lichtkoppler and R. Zondag. **2011**. Who polluted the water? Microbial forensics for identifying major fecal contamination sources at Lake Erie Beaches. U.S. EPA National Beach Conference, March 15-17. Miami, FL
35. **J.W. Marion**, J. Lee and T.J. Buckley. Storms and Total Phosphorus: Practical and Rapid Predictors of Advisory Conditions at Inland Ohio Beaches. **2010**. [Accepted for oral and poster presentation at the Water Management Association of Ohio 2010 Conference, November 17-18. Columbus, Ohio].\*Most Outstanding Poster Winner
36. **J.W. Marion** and J. Lee. **2009**. Determining Research Needs at Ohio Inland Lakes Not Covered by the BEACH Act. *Proceedings of the 2009 National Beach Conference*. April 20-22. Huntington Beach, CA
37. B.C. Reeder, A.D. Haight, **J.W. Marion**, P.W. Whitley and R.C. Johnson. **2005**. *Assessment of electronic component waste in Appalachia*. Final Report to USEPA Rural Environmental Academy: Addressing Environmental Justice through an Environmental and Public Policy Research Network.

38. B.C. Reeder, G. Gearer, **J.W. Marion**, P.W. Whitley and J.Hunt. **2005**. *Trends in water quality in the upper Licking River after sewage upgrades*. Final Report to Kentucky PRIDE.
39. B.C. Reeder, T. Leonard, **J.W. Marion**, P.W. Whitley, L. Crum, J. Hunt, C. Shields and J. Thompson. *Water quality trends in the Upper Licking River Watershed: physical and chemical parameters 2003-2004*. **2005**. 21<sup>st</sup> Annual Scientific Symposium of the Ohio River Basin Consortium for Research and Education (ORBCRE). October 26-28. Huntington, WV.

### **Panel Presentations**

1. **J.W. Marion** (Panel Chair), N. McCoy, J. Unrine, S. Scott. **2020**. Martin County Water 2000 to 2020. Children's Environmental Health Summit, Kentucky Department of Public Health. June 11, 2020. Virtual.
2. **J.W. Marion** (Panel Chair), A.M. Zimeri, C.Pinion, Jr., and V. Grabeel. **2019**. Movers and matchmakers: faculty & practitioner roles for preparing future professionals for a future EH era. National Environmental Health Association Annual Education Conference & Exhibition, July 11, 2019. Nashville, Tennessee.
3. M. Barnett (Panel Chair), R. Buckley, A. Foster, and **J.W. Marion**. **2019**. Community in crisis: operating within your emergency operation plan. National Environmental Health Association Annual Education Conference & Exhibition, July 11, 2019. Nashville, Tennessee.
4. L. Bricknell , Chair (Central Queensland University, Australia), J. Kyomuhangi (Uganda Ministry of Health), D. Musoke (Makerere University, Uganda), and **J.W. Marion**. **2019**. Engineering environmental health training and practice to tackle global challenges. Panel role: Environmental health training and education in the U.S. 3<sup>rd</sup> International Federation of Environmental Health World Academic Conference and 16<sup>th</sup> Annual Makerere University Environmental Health Student Association Scientific Conference, April 9, 2019, Kampala, Uganda.
5. D.T. Dyjack, B.W. Brooks, A. Dyjack and **J.W. Marion**. **2017**. The environmental health profession becoming a leader, connector, and interdisciplinary catalyst for One Health. One Health | One Global Environment Conference, October 25, 2017. Montego Bay, Jamaica.

### **Invited Talks**

1. Writing Public Science Course (UK-WRD 305). February 27, **2020**. Our Water Quality, Health, and Perceptions: Lessons from Appalachian Kentucky and the Midwest. By invitation of Dr. Katherine Rogers-Carpenter, University of Kentucky, College of Arts & Sciences, Department of Writing, Rhetoric, and Digital Studies, Lexington, Kentucky via Skype.
2. Unconventional Threats and Responses Course (HLS 435). March 26, **2019**. Climate impacts on environmental health and responding to the knowns and unknowns. By invitation of Dr. Joann McGlown Eastern Kentucky University, College of Justice & Safety, Department of Homeland Security, Richmond, Kentucky.
3. Eastern Kentucky University Scholars Institute, Richmond, Kentucky. May 15 & 16, **2018**. (1) Finding Funding Resources and panelist for (2) Grant Writing Basics.
4. Unconventional Threats and Responses Course (HLS 435). April 10, **2018**. Climate impacts on environmental health and responding to the knowns and unknowns. Eastern Kentucky University, College of Justice & Safety, Department of Homeland Security, Richmond, Kentucky.
5. Zhejiang Medicine Company Environmental Health and Safety Workshop, Shaoxing, Zhejiang, P.R. China. July 18, **2017**. Managing Waste & Wastewater for Ensuring Product Quality and Protecting Environmental Health – Part II.
6. Baylor University Environmental Health Science Department Seminar, Waco, TX, April 12, **2017**. The journey from inland U.S. recreational water quality to international environmental health.
7. Zhejiang Medicine Company Environmental Health and Safety Workshop, Shaoxing, Zhejiang, P.R. China. July 12, **2016**. Managing Pharmaceutical Waste & Wastewater for Ensuring Product Quality and Protecting Environmental Health.
8. Interstate Seminar in Environmental Health, Savannah, GA, July, **2014**. Quantifiable public health benefits associated with drinking water disinfection.
9. EKV Environmental Health Symposium, Richmond, KY, April, **2014**. Quantifiable public health benefits associated with drinking water disinfection.

10. Morehead State University Biology Seminar, March 14, **2014**. Rapid phyocyanin fluorometry predicts cyanotoxins in eutrophic lakes. Morehead, Kentucky.
11. Introduction to Global Health (HEA 310) Class. February 28, **2014**. Quantifiable public health benefits associated with drinking water disinfection. Eastern Kentucky University, Richmond, Kentucky.
12. Kentucky Association of Milk, Food, and Environmental Sanitarians. February 20, **2014**. Water quality in Kenya. Marriott Griffin Gate, Lexington, Kentucky.
13. Eastern Kentucky University Biology Seminar, September 13, **2013**. Heavy metals exposure and health among southeastern Kentucky well water users. Richmond, Kentucky.

## **TEACHING**

### **Courses Directed**

2020 – Current	EKU EHS 300 – Water and Health
2020 – Current	EKU EHS 370 – Environmental Disease Detectives: Environmental Epidemiology
2020 – Current	EKU MPH 840 – Research Methods in Public Health
2017, 2020	EKU HON 317 – Essentials of Life (Honors Air & Water Course)
2017 – Current	EKU EHS 835 – Survey of Public Health Statistical Analysis Methods
2013 – 2019	EKU EHS 300 – Water Supply and Wastewater Management
2013 – Current	EKU EHS 300 – Water Supply and Wastewater Management Lab
2015 – Current	EKU HEA 830 /MPH 830 – Biostatistics in Health Sciences
2012 – 2019	EKU EHS 370 – Environmental Epidemiology and Risk Assessment
2014 – Current	EKU MPH 800/EHS 800 – Environmental Health Research Process
2013 – 2015	EKU MPH 895 – Public Health Capstone
2013 – 2019	EKU EHS 890 – Graduate Project in Environmental Health
2012 – 2013	EKU EHS 440 – Environmental and Industrial Toxicology
2012 – 2015	EKU EHS 230 – Diseases and Hazards of Leisure

### **MS Committees**

2014 – 2016     John C. Bourne (Biology)

### **MPH Research Mentorship**

2021	Samuel Hayworth	2021	Kidus Shiferawe
2021	Camara Vasaly	2021	Yoshua Reed
2021	Seydou Doumbouya	2019	Larissa Watkins
2018	Abraham Maritim	2019	McKenzie Hopkins
2018	Elliott Baldrige	2018	MacKenzie Richardson
2018	Michael Shenkel	2017	Sydney Thurman
2017	Sarah Hughes	2017	Arkadiusz Front
2017	Amos Kosgey	2017	Julie Osman
2016	Will Strait, III	2016	Cassi Gibson
2016	Shelly Craft	2016	David Heath Stone
2015	Adams Ronnoh	2015	Jamie Hisel
2015	Cassi Gibson	2015	Richard Stockwell
2015	Melanie Jones	2015	Efia Taylor
2014	Elkana Kurgat	2013	Morgan Riley
2014	Alina Strand	2013	Nicole Kennedy
2014	Andrew Todd	2013	Blake Dobbs
2014	Melissa Claar	2014	Leonard Preston

2014	Chinonye Akunne	2013	Natashua Leonard
2014	Folasuyi Richardson	2013	Alan Worley
2013	Peter Sigilai	2013	Ben Cheruiyot

### **Undergraduate Research Mentoring**

2021	Callie Boggs
2019 – 2020	Nickson Rotich, Amber Turner, Steven Mills, Swade Banned, Lana Sexton
2016 – 2017	Steven Petz
2016 – 2017	Corrine Schwabb
2016 – 2017	Ambrose Maritim
2015 – 2016	Melissa Gemmer
2015 – 2016	Susan Campbell (EKU Honors)
2014 – 2015	Ashley Joyner (EKU Honors)
2014	Candice Graves
2013 – 2014	Elizabeth Berger (EKU Honors)
2013 – 2014	Stephanie Moore (McNair Scholar)

### **CURRENT & COMPLETED RESEARCH & SERVICE SUPPORT**

#### **Current Sponsored Research & Service**

NIH/National Institute for Environmental Health Sciences ( <b>PI: Marion</b> ) R13ES032657 - <i>Integrating U.S. Environmental Health Research and Practice into the Global One Health Framework: The One Health Conference</i> Prime: NIH/NIEHS (\$8,000)	2021 – Current
Internal, Eastern Kentucky University (PI: Marion) <i>Assessment of ColiGlow for Enumerating E. coli in Western Kenya</i> Prime: Office of Sponsored Programs, Research Enhancement Grant (\$9,917)	2020 – 2021
Internal, ECU Board of Regents Board Innovation Fund ( <b>PI: Marion</b> ) <i>Rapid Detection &amp; Enumeration of E. coli by a Novel ATP approach</i> Prime: Eastern Kentucky University (\$11,686)	2019 – 2021
Internal, ECU Board of Regents Board Innovation Fund ( <b>PI: Marion</b> ) <i>Development of Coli-Count for Easy Enumeration of E. coli in Water Anywhere</i> Prime: Eastern Kentucky University (\$12,000)	2019 – 2021

#### **Completed Sponsored Research & Service Activities**

Kentucky Water Resources Research Institute ( <b>PI: Marion</b> ) <i>Predicting Harmful Cyanobacteria in Central Kentucky</i> Prime: U.S. Geologic Survey - 104B State Water Resources Research Institute (\$9,988)	2019 – 2020
Kentucky Water Resources Research Institute ( <b>PI: Marion</b> ) <i>Predicting Harmful Cyanobacteria in Central Kentucky</i> Prime: University of Kentucky via Kentucky Water Resources Research Institute (\$5,406)	2019 – 2020
Southeast Center for Agricultural Health and Injury Prevention ( <b>PI: Marion</b> ) <i>Assessment of MRSA Nasal Carriage Among Kentucky Cattle Workers (\$14,200)</i> Prime: Centers for Disease Control & Prevention and National Institute for Occupational Safety and Health	2017 – 2018
Internal, Eastern Kentucky University ( <b>PI: Marion</b> )	2017 – 2018

*Assessing Antibiotic Resistance in Environmental Bacteria from Wastewater Effluents in Clark County, Kentucky. (\$4,000 total).* Prime (1): President's Research & Scholarship Fund \$3,500. Prime (2): College of Health Sciences \$500

Internal, Eastern Kentucky University (**PI: Marion**) 2017  
*Travel Support to Present Evaluation of a Simple Field-Based Method for Quantification of E. coli in Water at 2017 American Public Health Association Meeting*  
Prime (1): President's Research & Scholarship Fund \$500

Internal, Eastern Kentucky University (**PI: Marion**) 2016 – 2017  
*Antibiotic Residues in Milk from Milk ATMs in Western Kenya (\$3,899 total).* Prime (1): Office of Sponsored Programs \$2,999. Prime (2): EHS Department (\$650) // MPH Program Office \$250

Internal, Eastern Kentucky University (PI: Alice Jones) 2015 - 2016  
*Developing water quality field monitoring labs for Watershed Watch. (\$25,000 total)*  
Prime: EKU Center for Appalachian Reg. Engagement & Stewardship \$25,000  
Role: Assist in lab setup and operations in Middlesboro and Letcher/Harlan Co. for Kentucky River & Upper Cumberland Watershed Watch

Health Resources and Services Administration (**PI: Marion**) 2014 – 2015  
*Kentucky Environmental Public Health Traineeships Program (\$246,934 total)*  
\$77,411 awarded in year 1, years 2 & 3 of program not supported for all of the HRSA Public Health Trainingship Awardees.

Internal, Eastern Kentucky University (PI: S. Moore and **J. Marion**) 2014  
*Evaluating Cyanobacteria and Cyanotoxins in Selected Kentucky Lakes (\$1,000 total)*  
Prime: EKU Division of Natural Areas \$1,000

Internal, Eastern Kentucky University (**PI: Marion**) 2013 – 2014  
*Investigating Heavy Metal Exposure and Associated Health Effects among Well Water Users in Southeastern Kentucky (\$26,500 total).* Prime (1): Center for Appalachian Regional Engagement & Stewardship \$25,000  
Prime (2): MPH Program Office \$1,500

Internal, Eastern Kentucky University (**PI: Marion**) 2012 – 2013  
*Gastrointestinal Illness and Public Perceptions of Drinking Water Disinfection in Western Kenya (\$9,500 total).*  
Prime (1): Office of Sponsored Programs \$8,500; Prime (2): MPH Program Office \$1,500

Ohio Lake Erie Commission, Lake Erie Protection Fund (PI: J. Lee) 2011 – 2012  
*Does Fecal Indicator qPCR Predict Lake Erie Pathogen Levels? (\$15,000 total)*  
Role: Post-Doc, Grant co-author

U.S. EPA, Great Lakes Restoration Initiative (PI: J. Lee) 2010 – 2012  
*Innovative Rapid Detection of Lake Erie Fecal Sources (\$249,511 total)*  
Role: Graduate Research Assistant, Post-Doc, Project Manager, Grant Co-Author

Ohio Lake Erie Commission, Lake Erie Protection Fund (PI: J. Lee) 2010 – 2011  
*Rapid detection of viable B. fragilis in Lake Erie (\$14,992 total)*  
Role: Graduate Research Assistant, Grant Co-Author

Ohio Water Development Authority, R&D Grant (PI: Buckley) 2008 – 2010  
*Protecting Public Health at Ohio Inland Beaches: Development of Water Quality Indicators for Recreational Microbial Exposure (\$171,259 total).*  
Role: Lead Researcher (towards doctoral dissertation) and Lead Grant Author and Presenter

Internal, The Ohio State University, PHPID (**Fellowship: Marion**) 2008 – 2010  
*Protecting Public Health at Ohio Inland Beaches: Development of Water Quality Indicators for Recreational Microbial Exposure (\$67,800 total).* Prime: OSU Public Health Preparedness for Infectious Diseases (PHPID).  
Role: PHPID Doctoral Fellow

U.S. EPA via University of Louisville (PI: Reeder) 2005-2006  
*Reading the River Education Workshop (\$70,104 total)*. Prime: Clean Water Act Section 319 CCWEP Grant  
Role: Graduate Student Research Assistant

National Oceanic and Atmospheric Administration (PI: Reeder) 2005-2007  
*The Upper Licking River Watershed: Teaching and Monitoring through PRIDE (\$612,100 total)*  
Role: Graduate Student Research Assistant

National Oceanic and Atmospheric Administration (PI: Reeder) 2003-04  
*The Upper Licking River Watershed: Teaching and Monitoring through PRIDE (\$456,188 total)*  
Role: Student Research Assistant

U.S. EPA Environmental Justice Small Grants Program (PIs: Reeder, Robbins) 2003-04  
*Environmental Justice Research: Assessment and Analysis of Electronic Component Waste in Appalachian Kentucky (\$24,154 total)*  
Role: Student Research Assistant

### **Funding Requests Not Supported**

NIH-NIGMS via University of Louisville (KBRIN) (PI: Marion) 2018  
*Risk factors for reduced heart rate variability. (\$113,537 total)*

NIH-NIGMS via University of Louisville (KBRIN) (PI: Marion) 2017  
*Risk factors for reduced heart rate variability. (\$113,392 total)*

Bill & Melinda Gates Foundation (PI: Marion) 2016  
*One Health & WASH Factors for Antimicrobial Disease Resistance Development (\$100,000 total)*

NIH-NIGMS via University of Louisville (KBRIN) (PI: Marion) 2016  
*Drinking water quality effects on illness and antibiotic resistance in Kenya (\$113,522 total)*

Robert Wood Johnson Foundation (PI: A. Jones, Role Co-PI: Marion) 2015  
*Creating a culture of health in Appalachia: Disparities and Bright Spots (\$750,000 total)*

Kentucky Academy of Science Research Fund (PI: Marion) 2014  
*Investigating cyanobacteria blooms and cyanotoxin formation in Kentucky Lakes (\$4,800 total)*

### **CERTIFICATIONS & LICENSSES**

ICS-100 Introduction to Incident Command System  
ICS 700 National Incident Management System  
S-110 Basic Wildland Fire Suppression Orientation  
S-130/190 Firefighter Training & Introduction to Wildland Fire Behavior  
CDL-B Class-B CDL with air brakes endorsement, Commonwealth of Kentucky

### **SELECTED PROFESSIONAL DEVELOPMENT**

2021 UAccel Incubator Program Hosted by Launch Blue in collaboration with the University of Kentucky Office of Technology Commercialization and Kentucky Commercialization Ventures. (January 2021 – December 2021)

2021 NAACP Training Series: Media Communications. March 31, 2021. Hosted by Mark Thompson

2020 UAccel Cohort 1 Pre-Seed Mini-Accelerator Program for Technical Startups. Hosted by Launch Blue in collaboration with the University of Kentucky Office of Technology Commercialization and Kentucky Commercialization Ventures. (12-week program, August 2020 – December 2020)

- 2019 – 2020 Faculty Fellows Program in Science Communication, 2<sup>nd</sup> Cohort. University of Kentucky Center for Appalachian Research in Environmental Sciences (UK-CARES) NIH/NIEHS P30 Center (P30ES026529). Directed by Ellen J Hahn (August 2019 – May 2020)
- 2015 Workshop, “NIH R15 AREA Grant Writing Workshop”, Kentucky Biomedical Research Infrastructure Network, 8 hours, Louisville, KY (November 7)
- 2015 Metacognition Workshop, Sandra McGuire, Eastern Kentucky University, 5 hours (October 30)
- 2015 Salzburg Global Seminar, Education for Global Citizenship, What, Why, and How. Global Citizenship Program 71 (GCP-71). Salzburg, Austria. 40 hours (July 13-20).
- 2014 Scholarship of Teaching/Community Development Syllabus & Curriculum Design 2015 Retreat. 12 hours, Maywoods Retreat Center, Crab Orchard, KY (July 6 - 7) Conference,
- 2013 Workshop "Academic Integrity and Diverse Student Populations", University Diversity Committee, Richmond, KY, (April 23).
- 2013 Workshop, “Research Capacity Building Workshop”, NIOSH Education and Research Center, University of Cincinnati, 8 hours (March 29) Conference.
- 2012 "32nd Annual Lilly Conference on College Teaching", Miami University, Oxford, OH, 24 hours. (November 16 - November 18).
- 2012 Workshop, "Diversity in the Classroom", University Diversity Committee and ECU T&L Center, Richmond, KY (November 12)
- 2012 Workshop, “NIH R15 AREA Grant Writing Workshop, Kentucky Biomedical Research Infrastructure Network, 8 hours. (October 19)
- 2012 Seminar, "Sexual and Gender Identity: What is Normal?", ECU Women and Gender Studies, Richmond, KY, (October 17).
- 2012 Workshop, "Accommodating Students with Disabilities: The Do's, the Don't's, and All In-Between", ECU Teaching and Learning Center, Richmond, KY, (October 1).
- 2012 Workshop, "Getting the Maximum Out of Your IDEAs", ECU Teaching and Learning Center, Richmond, KY, (September 24)
- 2012 Workshop, "Web Instruction and Support Learning Session", ECU Teaching and Learning Center, Richmond, KY, (September 5).
- 2012 Workshop, "Working with Academic Integrity", ECU Teaching and Learning Center, Richmond, KY, (August 22)