

Jacqueline R. Basham

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EDUCATION

Master of Public Health (Environmental Health Concentration) **May 2015**

Western Kentucky University, Bowling Green, Kentucky

Current GPA: 3.80

Capstone: A Comparison of Hazardous Materials Commodity Flow Studies in Five Kentucky Counties

Environmental Health & Safety Graduate Certificate **Dec. 2013**

Western Kentucky University, Bowling Green, Kentucky

Bachelor of Science in Environmental Health Science **May 2012**

Western Kentucky University, Bowling Green, Kentucky

Summa cum laude

Honors Thesis: The Evaluation of Water Quality and Weather Patterns as Indicators for Escherichia Coli in Slaters Creek Watershed in Millersville, TN

Occupational Safety & Health Certificate **Dec. 2011**

Western Kentucky University, Bowling Green, Kentucky

EMPLOYMENT & PROFESSIONAL EXPERIENCE

Instructor, Western Kentucky University **Aug. 2015 – Present**

Responsibilities included:

- **Instructed Intro to Environmental Science Class (ENV 280)**
 - Led class discussion on various environmental topics
 - Presented power point lectures both in-class and online
 - Developed class content and activities
- **Instructed General Safety Class (SFTY 270)**
 - Developed class content, activities, and discussion boards
 - Presented power point lectures online
- **Instructed Fundamental of Industrial Hygiene Lab (ENV 321)**
 - Demonstrated proper lab safety and equipment use
- **Instructed Internship in Environmental Health & Safety Class (ENV 491)**
 - Assisted students with completing internship portfolios
- **Instructed Principles of Environmental Toxicology (ENV 380)**
 - Led class discussions on environmental toxicology topics
 - Presented power point lectures both in-class and online
 - Developed class content, activities, quizzes, and tests

- **Instructed Hazardous & Solid Waste (ENV 480)**
 - Developed class content, activities, and discussion boards
 - Presented power point lectures online
- **Instructed Senior Environmental Health Seminar (ENV 486)**
 - Organized guest speaker to discuss panel interview strategies with students
 - Assisted students with creating effective resumes and cover letters
 - Led class discussions on career choices and interview techniques
- **Faculty Advisor for Environmental Health Science Student Association**
 - Worked with students to instruct a water safety informational session to elementary students at Ag Safety Day
 - Organized volunteers for various activities including: Household Hazardous Waste Day, Progressive Agriculture Foundation Safety Day, Goodlettsville Stream Clean-Up, Relay for Life, and No Child Hungry Food Drive.
 - Assisted KPHA with “Get Moving” day at Bowling Green Junior High

Teaching Assistant, Western Kentucky University

Jan. 2014 – May 2015
Aug. 2012 – Dec. 2012

Responsibilities included:

- **Instructed Intro to Environmental Science Class (ENV 280)** **Jan. – May 2015**
 - Led class discussions on various environmental topics
 - Presented Power Point lectures and developed class activities
 - Proctored exams
- **Assisted with Environmental & Occupational Epi Class (EHS 572)** **Jan. – May 2015**
 - Helped students learn SAS commands and functions
 - Graded quizzes and assignments
 - Proctored exams
- **Assisted with Environmental Health Online Course (PH 385)** **Aug. – Dec. 2014**
 - Posted quizzes, assignments and exams on Blackboard
 - Graded quizzes, assignments, discussion boards and exams
- **Instructed Industrial Hygiene Lab (ENV 323)** **Jan. – May 2014**
 - Calibrated air quality equipment and water quality equipment
 - Developed laboratory quizzes and administered them to the class
 - Explained and demonstrated proper use of laboratory equipment
 - Led class discussion about occupational safety and health issues
- **Assisted with Industrial Hygiene Class (ENV 321)** **Jan. – May 2014**
 - Aided students with worksheets for noise and heat exposure, gas laws, etc.
 - Created answer keys for several assignments and exams
 - Demonstrated and explained how to solve gas law equations in-class
- **Assisted with Hazardous & Solid Waste Online Course (ENV 480)** **Jan. – May 2014**
 - Created Power Point presentations based off the textbook
 - Graded quizzes, assignments, discussion boards and exams
- **Assisted with Intro to Water Resources Course (ENV 375)** **Aug. – Dec. 2012**
 - Developed discussion assignments for class
 - Graded quizzes and assignments
 - Calibrated and demonstrated water quality equipment

- **Assisted with Environmental Measurement Course (ENV 495)** **Aug. – Dec. 2012**
 - Assisted in developing research topics and abstracts
 - Reviewed final presentations

Graduate Assistant, Western Kentucky University **Aug. 2012 – May 2013**
Jan. 2014 – May 2015

- Assisted with writing and presenting information for ergonomics research project
- Developed a literature review and presentation about Gulf War Illness
- Entered and analyzed data for hazardous commodity flow studies
- Created first drafts of hazardous commodity flow study reports
- Assisted with research on estrogen concentrations in local water
- Worked with other students to develop a PSA video for the public health department

Student Worker, USDA Agricultural Research Service **May – Dec. 2013**

- Built 4-inch soil columns to use for experiments
- Developed and completed multiple laboratory background trials for soil columns
- Tested various media types and antibiotic concentration
- Determined background concentrations of bacteria in multiple soils
- Tested swine lagoon effluent for bacteria and antibiotic-resistant bacteria

PUBLICATIONS

Taylor, R., Golla, V., and **Basham, J.** (*In Progress*). A Comparison of Hazardous Materials Commodity Flow Studies in Five Kentucky Counties.

Brown, Jacqueline, "The Evaluation of Water Quality and Weather Patterns as Indicators for Escherichia Coli in Slaters Creek Watershed in Millersville, Tennessee" (2012). *Honors College Capstone Experience/Thesis Projects*. Paper 347. http://digitalcommons.wku.edu/stu_hon_theses/347

TECHNICAL REPORTS

Taylor, Ritchie D.; Golla, Vijay; **Brown, Jacqueline**, "Shelby County Hazardous Material Commodity Flow Study: Final Report" (August 2015).

Golla, Vijay; Taylor, Ritchie D.; **Brown, Jacqueline**; and Danny Blevins, "Rowan County Hazardous Material Commodity Flow Study: Final Report" (August 2014).

Taylor, Ritchie D.; Golla, Vijay; **Brown, Jacqueline**; and Wesley Delk, "Montgomery County Hazardous Material Commodity Flow Study: Final Report" (August 2014).

Golla, Vijay; Taylor, Ritchie D.; **Brown, Jacqueline**; Makinen, Bryan; Richards, Carl; and Makinen, Bryan, "Madison County, Kentucky, Hazardous Materials Commodity Flow Analysis: Final Report" (August 2014).

Taylor, Ritchie; Golla, Vijay; Myatt, Bob; Advani, Shailesh; Gole, Pragati; Nair, Rasmi; **Brown, Jacqueline**; Willis, Nate; and Barringer, Ellen, "Warren County, Kentucky Hazardous Materials Commodity Flow Analysis, Final Report" (2010).

PRESENTATIONS

"Hazardous Materials Commodity Flow Studies in Kentucky and Future Directions," Kentucky Emergency Response Commission for Kentucky Emergency Management, Versailles, KY, January 28, 2017

"A Comparison of Hazardous Materials Flow in Five Kentucky Counties: Urban vs. Rural Gradient," American Industrial Hygiene Conference & Exposition, Baltimore, MD, May 21-26, 2016

"An Innovative Approach to Service Learning and Watershed Management," Kentucky Public Health Association, Louisville, KY, March 26-28, 2013

"An Innovative Approach to Service Learning and Watershed Management," American Water Resource Association, Jacksonville, FL, November 12-15, 2012

"Water Quality Monitoring as a Tool for Assessing E. Coli Contamination in the Slaters Creek Watershed," Kentucky Public Health Association, Louisville, KY, March 27-30, 2012

GRANT-FUNDED / CONTRACT PROJECTS

Grant, "NIOSH Training Grant," Amount: \$250,000.00, Awarded, Start: October 1, 2017, End: September 30, 2022. Golla, V. (PI); Taylor, R. (Co-PI); **Basham, J. (Co-I)**; Hwang, J. (Co-I).

Grant, "Hazardous Materials Commodity Flow Analysis in Oldham County, KY," Amount: \$34,364.00, Awarded, Start: May 15, 2017, End: September 30, 2017. Taylor, R. (PI); Golla, V. (Co-PI); **Basham, J. (Co-I)**.

Contract, "Watershed Health Assessment, City of Portland, TN," Amount: \$9,994.00, Awarded, Start: August 25, 2016, End: June 30, 2017. Taylor, R. (PI); **Basham, J. (Co-I)**.

Grant, "Total Worker Health in Rural Workplaces: Challenges of Implementation and Follow-up," Amount: \$12,000.00, Awarded, Start: August 4, 2016, End: June 30, 2017, Closed: June 30, 2017. Watkins, C. (PI); Golla, V. (Co-PI); Macy, G. (Co-I); Lartey, G. (Co-I); **Basham, J. (Co-I)**.

Contract, "Bacteriological and Water Quality Assessment of the Mansker Creek Watershed," Pending. Taylor, R. (PI); **Basham, J. (Co-I)**; Shirley, M. (Co-I); Hunton, R. (Co-I).

Contract, "Bioassessment of the Mansker Creek Watershed," Pending. Taylor, R. (PI); **Basham, J. (Co-I)**; Hunton, R. (Co-I).

RESEARCH

Organized data and drafted reports for three **hazardous commodity flow studies** in Kentucky **May – Aug. 2014**

Assisted at the USDA Agricultural Research Service with **antibiotic resistance study** **May – Dec. 2013**

Sampled macroinvertebrates for **NPDES compliance** in Millersville & Goodlettsville, TN **April 2013**

Water quality sampling and E. coli sampling for NPDES compliance in Millersville & Goodlettsville, TN **Sept. 2011 – Mar. 2012**

Assisting with **data collection and report writing** for hazardous commodity flow study in Warren County, Kentucky **May – Aug. 2010**

HONORS & AWARDS

“IMPACT Belize Leadership Team Member & Participant” **Jan. 2011**
College of Health & Human Services, Western Kentucky University

“Outstanding Environmental Health Science Student” **April 2011**
College of Health & Human Services, Western Kentucky University

“Award of Excellence Scholarship Recipient” **Aug. 2008 – May 2012**
Western Kentucky University

EXTRACURRICULAR & VOLUNTEER EXPERIENCE

Committee Member, Department of Public Health Advising & Retention **Mar. – Dec. 2016**

Member, Kentucky Public Health Association (KPHA) **2012 – 2015**

Committee Chair for Thanksgiving Food Drive, KPHA **Nov. 2014**

Member, Environmental Health Science Student Association (EHSSA) **2014 – 2015**

Vice President, EHSSA **Jan. – May 2015**