

## EDUCATION

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### University of North Carolina at Chapel Hill

May 2022 (expected)

*Gillings School of Global Public Health – Chapel Hill, NC*

- Master of Science in Public Health

### Wheaton College – Wheaton, IL

Graduated 2016

- Bachelor of Science
- Major: Environmental Science, Concentration in Biology
- GPA: 3.86/4.00 (Summa Cum Laude)

### International Sustainable Development Studies Institute – Chiang Mai, Thailand

Spring 2015

- Studied the integration of community public health and environmental issues

## PROFESSIONAL EXPERIENCE

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### Epidemiology Specialist IV

May 2018 – Present

*Hawaii State Department of Health Hazard Evaluation Office*

*Hawaii Childhood Lead Poisoning Prevention Program – Honolulu, HI*

- Conduct statistical analysis of data to detect the occurrence of environmental disease and to identify geographic areas of high risk or overall temporal trends
- Co-lead a research project that will assess lead contamination in drinking water and soils at public schools and childcare facilities statewide.
- Develop and manage the environmental health model of the Maven electronic disease surveillance system that monitors exposure to heavy metals and pesticides.
- Identify and track children with elevated blood lead levels or properties with environmental contamination using Maven surveillance software.
- Oversee investigations of lead poisonings in Hawaii, including coordinating public health and clinical care and identifying potential lead hazards using an X-ray Fluorescence analyzer.
- Recommend necessary interventions to patients and physicians to prevent further human injury from exposure to lead and other environmental contaminants.
- Prepare and present educational programs to inform the public and health professionals of the policies, regulations, causes, and effects of environmental health hazards.
- Produce quarterly data reports for the Centers for Disease Control and Prevention (CDC) and the United States Department of Housing and Urban Development (HUD).

### Environmental Health Project Manager

June 2017 – May 2018

*ENPRO Environmental Consulting – Kailua, HI*

- Performed risk evaluation and site assessment work addressing PCBs, petroleum-related contaminants, pesticides, heavy metals, USTs, and non-point source contamination.
- Sampled air quality indicators such as mold/bacteria, carbon dioxide, carbon monoxide, temperature, relative humidity, VOC's, particulate matter, and other chemical contaminants to develop recommendations for improving indoor air quality.
- Provided microbial assessments and moisture mapping using a FLIR moisture reader and appropriate tape, swab, or bulk sampling.

- Conducted ASTM Standard Phase I and Phase II Environmental Site Assessments, including collecting soil samples and drilling for and assessing ground water contamination.
- Reviewed federal, state and county databases and regulatory files pertaining to environmental issues as well as Environmental Impact Statements.
- Directly oversaw the removal of identified environmental contaminants for public and private interest groups.
- Managed an average of 4-8 projects weekly, including environmental research, data collection, analysis, and report preparation.

### **Department Assistant**

January – May 2016

*Environmental Science Department – Wheaton College, IL*

- Served as a resource and collaborator on data collection, management, and analysis for student researchers in the department.
- Conducted extensive literature reviews, performed routine data collection, and developed annotated bibliographies for professor research on passive sewage treatment, indoor air pollution from cooking smoke, and hydroponics.
- Maintained laboratory facilities and the inventory, quality control, and labeling of the department's hazardous chemicals according to OSHA SDS standards.
- Directed program communications by interacting with potential research collaborators and prospective students.
- Redesigned the environmental science department web page using Sitecore software.

### **Senior Research Assistant**

September 2015 – May 2016

*Humanitarian Disaster Institute – Wheaton, IL*

- Drafted, formatted, and verified public health surveys to be administered to survivors of natural disasters around the world, including the South Carolina flooding and Syrian refugee crisis.
- Developed and presented a training seminar on disaster response ethics to student volunteers
- Assisted in planning and hosting the GC2 Summit on the global refugee crisis.
- Completed data entry of over 300 paper surveys into SPSS.

### **Environmental Exposure Intern**

April – August 2015

*Shan Women's Action Network– Fang District, Thailand*

- Developed, formatted, and translated the environmental exposure section of a biosocial survey which combined local interviews with the collection of biomarkers to determine the importance of stress pathways in refugee populations in Northern Thailand.
- Created extensive maps of refugee camps that included demographics, sanitation facilities, and pollution sources that could be analyzed in conjunction with the administered surveys.
- Collaborated with local migrant workers' families to test drinking surface water for pesticides and provide protective equipment to the workers handling chemicals.
- Provided culturally appropriate presentations on the dangers of lead found in traditional child medicines and on pesticide exposures from drinking contaminated water.
- Performed literature reviews concerning Shan refugees in Northern Thailand, environmental epigenetics, immigrant health, and maternal and child health.

### **Research Associate**

August – December 2014

*Water and Sewage Treatment Endeavor Laboratory – Wheaton College, IL*

- Assisted in engineering a sustainable, small-scale water stabilization pond (WSP) to provide treated water for irrigation and other agricultural purposes in the developing world.

- Tested the effectiveness of the lab system in different simulated environmental conditions by manipulating tank construction, light intensity, temperature, and retention time and comparing biochemical oxygen demand (BOD) reduction.
- Utilized a YSI ProPlus instrument with the appropriate probes to measure temperature, conductivity, pH, and dissolved oxygen (DO).
- Analyzed the process of nitrogen transformation using colorimetric methodology to assess ammonia and nitrate concentrations.

## PUBLICATIONS AND PRESENTATIONS

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### *Published Journal Articles*

- Diana Felton MD, **Kelly Hoffman** BS, Derek Priddy MBA, Pat Heu MD, MPH (2019). The State of Childhood Lead Poisoning in Hawai'i. *Hawaii Journal of Health and Social Welfare*. 78 (10): 320-324.
- **Baglia, Kelly** (2016). An Evaluation of Traditional Threshold Theories: Failure to Adequately Protect Human Populations from Pesticide Exposure. *Journal of Academic Essays*. 16 (1):25-31.

### *Invited Speaker or Conference Presentations*

- **Kelly Hoffman** and Kacey Ingalls (2020). Exposure to Lead in Federally Assisted Housing in Hawaii. HUD Statewide Online Conference. July 24. Honolulu, HI.
- Kacey Ingalls and **Kelly Hoffman** (2020). Childhood Lead Poisoning Data and Trends in Hawaii. Hawaii Childhood Lead Poisoning Prevention Quarterly Coalition. June 3. Honolulu, HI.
- **Kelly Hoffman** (2019). Public Health Surveillance in Hawaii using Maven Software. ASTHO State Quarterly Conference. October 18. Honolulu, HI
- Janet Berreman, MD, Diana Felton MD, **Kelly Hoffman** (2019). Childhood Lead Poisoning Prevention in Hawai'i. Kapiolani Medical Center for Women and Children Grand Rounds. July 22. Honolulu, HI.
- **Kelly Hoffman** (2019). Testing Your Home for Lead Hazards. Learning to Grow Childhood Conference. May 19. Kaneohe, HI.
- **Kelly Hoffman** and Derek Priddy MBA (2019). Updating Hawaii Administrative Rule 11-5, "Environmentally-Related Illness and Injury". Hawaii State Legislature Session HB201. February 14. Honolulu, HI.

## CERTIFICATIONS AND TRAININGS

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- Introduction to Environmental Risk Assessment. *Integral Consulting*. Honolulu, HI. August 2019
- Strategic Planning, Surveillance, and Evaluation. *National Healthy Homes and Lead Poisoning Prevention Training Center*. Atlanta, GA. June 2019.
- Maven Advanced Model Manger Training. *Conduent Public Health Solutions*. Austin, TX. March 2019
- Maven Admin Training. *Conduent Public Health Solutions*. Austin, TX. October 2018.
- Hawaii State Certified Lead Inspector and Renovator, Certification No. PB-0971. Honolulu, HI. January 2018
- ACAC Council-Certified Residential Indoor Environmentalist, Certification No. 1801008. Honolulu, HI. December 2017.

- IICRC Certified Water Restoration Technician (WRT). Honolulu, HI. September 2017.

## **SKILLS**

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### *Software*

- R, SQL, JMP, Stata, and all Microsoft products including advanced skills in excel
- ArcGIS Desktop and Online
- Maven Electronic Disease Surveillance Software

### *Language*

- Conversational in Thai