

CURRICULUM VITAE

EDUCATION

Indiana University, Bloomington, IN

Bachelor of Science: 2013

Major: Biology

Indiana University-Purdue University Indianapolis (IUPUI), Indianapolis, IN

Master in Public Health: 2016

Major: Epidemiology

PROFESSIONAL WORK EXPERIENCE

Indiana University, Bloomington, IN

Research Assistant: June 2009 - May 2011

Ovarian cancer epigenetics and epigenetic therapies studies

- Studied the effectiveness of novel cancer therapy (HDAC-42) on platinum-resistance ovarian cancer using ELISA to determine ID₅₀.
- Examined the epigenetics effects of novel cancer drugs on oncogenes using reverse transcriptase PCR.
- Investigated the epigenetic effects of novel cancer drug at different stages of platinum-resistance ovarian cancer cells using Western blot and ELISA.
- Determined the rate of transcription of oncogenes after HDAC-42 treatment.
- Grew and cultured platinum-resistance ovarian cancer cells.
- Trained four new undergraduate students.

Ball State University, Muncie, IN

Research Assistant: May 2011- August 2011, August 2013 – August 2014

- Determined genetic relatedness in *Bacillus* strains using PCR.
- Used ELISA to determine the effect of *Bacillus cereus* infection in the eye in mice model and determined the effectiveness of carvacrol treatment.
- Developed method to determine genus of unknown bacteria using novel PCR and SPSS analysis.
- Managed lab function including organization, creating stock solutions, ordering supplies, and autoclaving.

TEACHING EXPERIENCE

Ball State University - Summer Scholars Program, Muncie, IN

Microbiology Teacher June 2014 - July 2014

- Taught and demonstrated proper biological lab techniques.
- Assisted professor in managing students and ensuring lab safety.
- Helped create daily lesson plan.

IUPUI, Indianapolis, IN

Teaching Assistant

Introduction to Public Health (PBHL-E109): Fall 2016, Spring 2017

This course is designed to give the basic foundation for public health and demonstrate how every situation can be seen through a public health lens. When public health is working well, it's nearly invisible and many take for granted the public health successes. Public health's primary objective is prevention, and we will examine well-being, illness, injury, education, violence, housing, work, cultural and neighborhood variability either positively or negatively influence our health.

Zombie Apocalypse and Doomsday Infections (PBHL-E210): Fall 2017

This course is designed to expose undergraduate students to the concept infectious diseases in the context of a zombie infection. Included topics are: disease transmission, outbreak investigations, control measures, assessment, and field investigations. Case studies on respiratory infections, diarrheal diseases, emerging infectious diseases, HIV/Aids, Tuberculosis, STDs, and hepatitis

Foundations in Public Health Informatics (PBHL-E645): Spring 2018

This course introduces the field of informatics to public health students. Core aspects of informatics relevant to the collection, management, and application of public health data will be reviewed. Examples are drawn from core public health functions, such as vital

records, surveillance, immunization, environmental health, and community health assessment.

Guest Lectures

Principles of Epidemiology (PBHL-E322): Spring 2018

Guest lectured on public and population health informatics.

PRESENTATIONS AND PUBLICATIONS

HDAC-42 effects on platinum-resistant ovarian cancer.

Poster presented in August 2009 for the Intensive Freshmen Learning Experience at Indiana University in Bloomington, IN.

Williamson, L.M. Nimmer, P.S., Vukojevic, M., Bange, J.S., Ho, Y. & McKillip, J.L. 2015. *Bacillus cereus ocular virulence is exacerbated during exposure to subinhibitory concentrations of carvacrol.* *Infection and Immunity.*

Williamson, L.M. Nimmer, P.S., Kelly-Worden, M., Bange, J.S., Ho, Y. & McKillip, J.L. 2015. *Sublethal carvacrol exposure increases virulence of Bacillus cereus during endophthalmitis.* *Int'l J. Med. Microbiol., in press.*

Syphilis Testing among Women with Stillbirth Deliveries in Indiana 2010-16. Ho, Y.A., Dixon, B.E., & Arno, J. 2018.

Poster presentation in June 2018 for the National Library of Medicine Training Conference 2018 in Nashville, TN.

LEADERSHIP EXPERIENCE

Graduate Professional Student Government, IUPUI, Indianapolis, IN

Fairbanks School of Public Health Representative, Fall 2015 – Summer 2017

- Proposed and wrote legislation which created new standard of allocating the Graduate & Professional Educational Grants (GPEG), which provides \$60,000 in grant funding yearly to graduate and professional students at IUPUI.
- Led Graduate Professional Student Government initiatives at the Fairbanks School of Public Health.
- Acted as the liaison for the Masters of Public Health Student Government, Fairbanks School of Public Health P.h.D. Association, Master in Health Administration Association to the Graduate Professional Student Government.

Master of Public Health Student Government, IUPUI, Indianapolis, IN

Executive Board – Executive Communications Officer, Fall 2015 – Spring 2016

- Created and edited newsletter for student government.
- Represented the interests of the School of Public Health at campus-wide Graduate Professional Student Government meetings.
- Managed budgets for all events and overall budget.