**Iowa Lakeside Laboratory Field Experience Narrative Report**

**Dates:** March 14-18, 2022

**Host Sites:**

Katy Burke, Director of Population and Public Health, Lakes Regional Healthcare, an Avera Partner

Mary Skopec, Ph.D., Executive Director, Iowa Lakeside Laboratory: Regents Resource Center

**Location:**

The Iowa Lakeside Laboratory is a 147-acre field campus owned by the State of Iowa and operated through the Board of Regents with University of Iowa being the primary regents' institution overseeing and managing the campus.  The field campus mission is to provide science classes and research opportunities for university students and to offer Outreach Programs and services through the state universities.  In addition, the State Hygienic Laboratory supports an environmental laboratory that provides research and monitoring data of the lakes, aquifers and surrounding land of the campus.

**Need from Host site:**

Iowa Lakeside Laboratory – appropriate outdoor clothing, dietary restrictions, itinerary

Lakes Regional Healthcare/Dickinson County Public Health Department - need to wear masks

**Learning Objectives & Gaps Filled**:

Through this field campus experience, students will be able to:

* describe the importance of environmental testing to public health through hands-on sample collection for future testing for environmental contaminants related to agricultural and climate change impacts;
* compare and contrast the strategies used to provide public and environmental health support for a town's year-round population versus a major influx of tourists during the vacation months;
* distinguish the functional and strategic difference between hospital-based and stand-alone county health departments;
* construct a health and safety campaign to be used by the local public health department during the vacation months; and
* explain the importance of environmental testing through hands-on experience working and performing tests in a state environmental laboratory environment.

The gaps filled by this trip:

* Introduces students to the public and environmental health opportunities and initiatives provided by an outdoor research and teaching campus,
* Explains the difference between hospital-based and stand-alone county health departments,
* Demonstrates the importance of environmental testing to the health of a community, both physically and economically, and
* Identifies the need to have multiple population health strategies based on the time of year.

**Students Attending:** (# of undergraduate & # of graduate students and field of study)

1 undergraduate, second year – pre-med with public health certificate

2 graduate students – Epidemiology

2 Faculty

**Description of projects:**

Spring Break 2022: Three Strike Force members traveled to the Iowa Lakeside Laboratory field campus for Spring Break to experience hands-on environmental research and monitoring and its intersection with public health, learn how a local public health department handles going from a population of 12,000 to 120,000 during the tourist season the public health issues tourism raises, the differences between a hospital-based and stand-alone government based public health department, and assist in literature review and best practices for development of the county Health Improvement Plan.

**Description of Field Experience:** (student perception & field staff perception)

Final itinerary is attached. The most significant experience was learning and understanding the relationship of environmental and public health and the depth environmental health has on the health of the community and its individuals. “Bonus” experiences included working at a mobile food bank including completing a Civil Rights course required by the U.S.D.A. for food bank volunteers and learning the inner workings of a major fish hatchery and its impact on the environmental health of the region, including other states.

**Summary of Evaluations:** (host site & students)

Student Evaluation Results

|  |  |  |
| --- | --- | --- |
| Question (n=3) | Strongly Agree (%) | Agree (%) |
| Was the field experience communication timely? | 67 | 33 |
| Was the field experience informative? | 100 |  |
| Were the objectives for this project clearly defined? | 67 | 33 |
| Was your field experience role and responsibilities clearly defined? | 67 | 33 |
| Was the field experience team approachable and available? | 100 |  |
| Was the field experience’s outcome what you expected? | 100 |  |

Comments:

**How does this experience enhance your educational goals/field of study?**

* I was able to learn more about public health and the ways that public health and environmental science work together.
* The field trip gave a broader perspective of Public Health in an actual and practical manner. Interacting with county public health, taking samples and their analysis enhanced the understanding of public health.
* This experience gave insight to the realm of environmental health and how connected it is to public health. Our conversation with Katie (Director of Dickinson County Public Health) was very informational for future job requirements in local public health departments.

**Did this experience expose you to new knowledge you can apply to your academic work? If so, please provide an example(s).**

* Yes, I learned about how the Dickinson public health county functioned. I also learned about different bacterial/microbial water testing experiments.
* Improved my knowledge and Perspective about Environmental factors of public health, which can be applied to academic work
* My academic studies are limited to public health right now, but it's nice to have the knowledge of everything that public health directors have to take into account to aid in advancing the health/safety of their communities.

**What went well?**

* I was able to gain new knowledge and new connections.
* almost everything. The faculty was caring and supportive, range of experiences was amazing. Food and Lodging were of great standards.
* There was beautiful scenery, food, and various areas of learning experiences.

# **What needs to be improved?**

* Everything was up to my expectations.
* Try to have a more solidified itinerary at the start of the trip

Host Evaluation Results

|  |  |  |
| --- | --- | --- |
| Question (n=2) | Strongly Agree | Agree |
| Were the objectives for this field experience clearly defined | 100 |  |
| As a host site, was your role and responsibilities clearly defined? | 50 | 50 |
| Was there support available when you needed it preparing for and ruing the field experience? | 50 | 50 |
| As a host site, was the field experience’s outcome what you expected? | 50 | 50 |
| Did the organizers provide timely and detailed communications? | 100 |  |

Comments:

**Did this experience enhance your professional growth? If so, please explain.**

* Yes, each time you have an opportunity to share your work, it challenges you to succinctly describe it and opens the door for discussion. It was wonderful to zoom out from pandemic response to look at my role and our organization from a more holistic public health viewpoint.
* We are working to build partnerships with the UI Public Health programs and this experience enhanced that objective.

**Did this experience benefit your organization? If so, please provide an example(s).**

* While we have not received deliverables from the visit yet, I believe these will arrive later. Intrinsically, there were productive conversations during the visit that added value, and it was a positive experience overall.
* Yes. Building partnerships with faculty and staff was extremely beneficial. Our staff and interns gained new insights on the work of public health professionals.

**What went well?**

* I enjoyed hearing why each of the students and administrators were interested in pursuing/incorporating public health into their academic and professional careers. That was energizing. I appreciated their engagement throughout the visit.
* Field tours, discussions, informal exchanges

**What needs to be improved?**

* With more advanced notice and details about the students' interests/skillsets, the project requests may have been more tailored. Would love to see more students attend next time!

**Would you be willing to host a Strike Force experience again?**

* Yes
* Absolutely. We support this program 100%

FINAL Spring Break Activities- CPH Strike Force

Iowa Lakeside Laboratory, Milford, IA

March 14 – March 18

March 14 - Monday

* Arrive at Iowa Lakeside Laboratory

March 15 - Tuesday

AM

* Overview and discussion with Mary Skopec, PhD, Director of Iowa Lakeside Laboratory
* Lakes water sample collection with Americorps interns

PM

* Introduction and overview of the SHL Environmental Laboratory
* Seminar with Katy Burke, Director of Dickinson County Health Department
  + How seasonal tourism population impacts public health strategies
  + Difference between a county-based versus hospital-based health department
  + Strategies a small department uses to accomplish big things
  + Introduction and overview of “Be Healthy, Be Safe” campaign and input desired from the students
* Bonfire

March 16 – Wednesday

AM

* Driving tour of Lakes area for housing and environmental discussions
* Tour of Dickinson Public Health Department at Lakes Regional Medical Center

PM

* Nitrate/nitrite testing of Lake Water
* Work in SHL Environmental Laboratory
* Discussion with Mary Skopec
* Out to eat

March 17 – Thursday

AM

* Dickinson County Nature Center
* Tour Fish Hatchery

PM

* Assist with Mobile Food Bank