Public Health Practice

Stories from the Field
The University of Texas School of Public Health
Student Practicum Experiences
Spring 2015 – Environmental & Occupational Health
The practicum experience is an integral part of the MPH and DrPH curricula. Public health students are provided with the opportunity to apply their classroom knowledge to real world settings through which they make a meaningful contribution to a public health organization.

Under the guidance of a community preceptor and faculty sponsor, students from all divisions gain a deeper understanding of public health practice, interact with professionals in the field, and expand their repertoire of professional skills.

This sixteenth-edition e-magazine showcases student practicum experiences throughout the Spring 2015 semester. (Prior semesters may be accessed through the e-book, a collection of student abstracts and e-magazines describing their experiences.)
# Practicum Topics

Number of Students: 3

<table>
<thead>
<tr>
<th>Hours per Week per Student</th>
<th>Approximately 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campuses (Houston)</td>
<td>1</td>
</tr>
<tr>
<td>Division</td>
<td>1</td>
</tr>
</tbody>
</table>

## Environmental & Occupational Health

<table>
<thead>
<tr>
<th>Environmental Safety</th>
<th>Payel Acharya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Review Board</td>
<td>Christian Vilca</td>
</tr>
<tr>
<td>Comparative Effectiveness Research</td>
<td>Sumaira Zareef</td>
</tr>
</tbody>
</table>
Environmental Safety in the Research Laboratory

By: Payel Acharya

In the spring of 2015, I served as a Health and Safety Intern at Baylor College of Medicine’s (BCM) Office of Environmental Safety (OES). The OES is concerned with the safety of the researchers and monitors biological, radiological, chemical and fire safety issues throughout the institution. My responsibilities were to conduct annual and comprehensive health and safety inspections in a variety of research labs, ranging from cancer to neurobehavioral research, at multiple locations.

During these inspections, I identified potential safety hazards, prepared chemical inventories of hazardous chemicals in the labs, and assisted in preparing and posting hazard warning signage on laboratory doors. The final products were reports that were communicated to the lab Principal Investigators (PIs), assisting them in maintaining compliance with current safety regulations and standards.

Public Health Significance

Essential Public Health Services Performed at Baylor College of Medicine’s Office of Environmental Safety:

Baylor College of Medicine is actually a collection of over 30 research centers, including 42 BCM and BCM-affiliate buildings, and thousands of employees from different parts of the globe. The information communicated during the lab inspections help researchers maintain a safe and healthy workplace.

Monitor: OES monitors by assessing biological and chemical safety hazards through regular visits to labs, checking adherence to safety standards

Diagnose and Investigate: OES responds to breaches in safety protocols and practices, by investigating the causes and providing suggestions for remediation

Inform, Educate and Empower: In communicating safety concerns to PIs, OES addresses safety concerns and questions, bridging gaps in knowledge of researchers on current safety regulations.

In my practicum with Committee for the Protection of Human Subjects (CPHS), I identified issues when analyzing interventional and observational studies. As I reviewed some of the initial review studies, questions related to minimal risk, decision-making capacity, differentiation between research and standard-of-care procedures, and adequacy of informed consent of patients constituted the majority of encountered issues.

Halfway through my practicum, it became evident that while epidemiology and biostatistics concepts aid understanding of a study’s design, a basic knowledge of ethics principles serves as the most practical tool. My findings will be further discussed with my preceptor and form part of my final deliverable.

SPRING 2015 Practicum at Committee for the Protection of Human Subjects (UT Health IRB)

by: Christian Vilca

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Public Health Significance

Of the ten essential public health services, the Institutional Review Board would most easily be characterized by those functions related to assurance and enforcement of laws and regulations.

Under federal law governing Human Subjects Research (45 CFR 46), the IRB ensures the necessary information is communicated to all potential participants of research, or their legally authorized representative.

As a product of collective judgment, studies under review are carefully designated as approved, approval-pending, or deferred. Come what may, the IRB has the public-spirited duty and desire to advance law-abiding and ethical research that promotes medical advancements in order to reduce the burden of disease.
Cost Effectiveness analysis of treatment strategies for pancreatic cancer based on imaging biomarkers identified at MD Anderson Cancer Center.

Sumaira Zareef

I am working at the department of Radiation Oncology MDACC on a comparative effectiveness research project structuring a decision tree analysis to see how some of the imaging biomarkers that have been identified in pancreatic cancer patients at MD Anderson Cancer Center may impact the cost of care for patients. I am carrying out data analysis (survival analysis) under the supervision of Dr. Eugene Koay. We are aiming to publish the findings of the project.

Public Health Significance

This project focuses on the following essential Public Health Services:

Monitor the prognosis of patients with pancreatic cancer when treated with more cost effective regimens.

Inform, educate and empower physicians and patients about cost effective treatment regimens for pancreatic cancer.

Develop cost effective therapeutic protocols for patients diagnosed with pancreatic cancer.

Evaluate effectiveness, accessibility and quality of pancreatic cancer treatment protocols.

Research for new insights and cost effective solutions for pancreatic cancer.

Pearl of Wisdom:

Practicum is the most critical component of your graduate school experiences as you get hands on experience by working with people who have carried out various major Public Health projects and have played leadership roles in the field of Public Health.
For more information regarding The University of Texas School of Public Health, Office of Public Health Practice and the practicum program, please visit: https://sph.uth.tmc.edu/practicum/