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 fourteenth-edition e-magazine showcases student practicum experiences throughout the Summer 2014 semester. (Prior semesters may be accessed through the e-book, a collection of student abstracts and e-magazines describing their experiences.)

UTHealth School of Public Health
The University of Texas Health Science Center at Houston
## Practicum Topics

**Serving Size:** 1 Practicum per Student  
**Servings per e-Magazine:** 43

<table>
<thead>
<tr>
<th>Hours per Week per Student</th>
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<tbody>
<tr>
<td>Campuses</td>
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</tr>
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</table>

### Austin Regional Campus

<table>
<thead>
<tr>
<th>Topic</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out-of-School Time Opportunities</td>
<td>Mandy Ackerman</td>
</tr>
<tr>
<td>Keep Austin Breastfeeding</td>
<td>Amy Brandes</td>
</tr>
<tr>
<td>Improving Nutrition in Migrant Camps</td>
<td>Magdalena Hernandez</td>
</tr>
<tr>
<td>Outdoor Advertising/ Public Health Research</td>
<td>Ana Herrera</td>
</tr>
<tr>
<td>Refugees and Recreational Needs</td>
<td>Amy Hoskins</td>
</tr>
<tr>
<td>Acute pesticide exposures in Texas</td>
<td>Katherine Kantzes</td>
</tr>
<tr>
<td>Project Development/Creating Change</td>
<td>Kelli Lovelace</td>
</tr>
<tr>
<td>Communication is Key</td>
<td>Blaine Mallon</td>
</tr>
<tr>
<td>After-School Program in Uruguay</td>
<td>Irene Parobii</td>
</tr>
<tr>
<td>Perinatal Hepatitis B Prevention</td>
<td>Hailey Rucas</td>
</tr>
<tr>
<td>Special Olympics - Special Smiles</td>
<td>Bhumit Shah</td>
</tr>
<tr>
<td>Patient Handoff Research</td>
<td>Daniel Thomas</td>
</tr>
</tbody>
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### Brownsville Regional Campus

<table>
<thead>
<tr>
<th>Topic</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Food Service Program</td>
<td>Ileana Chapa</td>
</tr>
<tr>
<td>Mosquito Trap Database</td>
<td>Angel Guevara</td>
</tr>
<tr>
<td>Parent Wellness and Health</td>
<td>Alessandra Jiménez</td>
</tr>
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### Dallas Regional Campus

<table>
<thead>
<tr>
<th>Topic</th>
<th>Student</th>
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<tbody>
<tr>
<td>Gay City Health Project</td>
<td>James Bowen</td>
</tr>
<tr>
<td>Can Pediatricians Help Prevent Bullying?</td>
<td>Nia Jones</td>
</tr>
<tr>
<td>The BVM Effect</td>
<td>Christopher Leba</td>
</tr>
<tr>
<td>Tobacco Cessation in Dallas</td>
<td>Jiesu Lee</td>
</tr>
<tr>
<td>The Agape Clinic: Strategic Planning</td>
<td>Leigh Logsdon</td>
</tr>
<tr>
<td>Topic</td>
<td>Instructor</td>
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<tr>
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<tr>
<td>Nutritional Literacy and Knowledge</td>
<td>Antonio Lopez</td>
</tr>
<tr>
<td>Childhood Obesity</td>
<td>Saundra Nguyen</td>
</tr>
<tr>
<td>Sickle Cell Disease Research</td>
<td>Hellen Oduor</td>
</tr>
<tr>
<td>Fever Phobia in Community Care Clinics</td>
<td>Reema Patel</td>
</tr>
<tr>
<td>Preventing Childhood Obesity</td>
<td>Shilpa Patil</td>
</tr>
<tr>
<td>Childhood Obesity and Nutrition</td>
<td>Nessa Philip</td>
</tr>
<tr>
<td>Public Health Syndromic Surveillance</td>
<td>Romero Santiago</td>
</tr>
<tr>
<td>Tactical Emergency Medical Support (TEMS)</td>
<td>Thomas Schaeffer</td>
</tr>
<tr>
<td>Chemical Contamination of Ecosystems</td>
<td>Justin Stuart</td>
</tr>
</tbody>
</table>

**El Paso Regional Campus**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society, Community and the Individual</td>
<td>Jeffrey Mohlman</td>
</tr>
<tr>
<td>Influenza Types in El Paso</td>
<td>Alice Nyakeriga</td>
</tr>
<tr>
<td>Public Health Preparedness</td>
<td>Hector Ocaranza</td>
</tr>
</tbody>
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**San Antonio Regional Campus**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Trends in the Elderly</td>
<td>Daniel Ayala</td>
</tr>
<tr>
<td>Active Living</td>
<td>Amanda Merck</td>
</tr>
<tr>
<td>Piloting the PRISm Intervention</td>
<td>Nadia Silva</td>
</tr>
<tr>
<td>Dental Public Health</td>
<td>Armia Zaki</td>
</tr>
</tbody>
</table>

**STEER: South Texas Environmental Education & Research**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Outreach</td>
<td>Christine Binkley</td>
</tr>
<tr>
<td>Health on the Texas-Mexico Border</td>
<td>Lauren Fanty</td>
</tr>
<tr>
<td>Public Health on the Texas-Mexico Border</td>
<td>Rebekka George</td>
</tr>
<tr>
<td>Public Health on the Border</td>
<td>Rutger Gunther</td>
</tr>
<tr>
<td>Health on the Texas-Mexico Border</td>
<td>Alison Kimura</td>
</tr>
<tr>
<td>STEER: Public Health on the Border</td>
<td>Sierra Mitchell</td>
</tr>
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Public Health Significance

Over half of the achievement gap between lower- and higher-income students can be explained by unequal access to out-of-school opportunities. As a result, low-income students are less likely to graduate from high school or enter college (Alexander et al, 2007). It is therefore essential to expand out-of-school learning opportunities in order to promote positive health, social and educational outcomes, especially for low-income children.

Inform, educate and empower: students and families through comprehensive health and STEM focused curriculum

Evaluate: effectiveness, accessibility and quality of out-of-school programming

Research: insights and innovative solutions to how to target summer learning loss

Develop policies and plans: that support students and community health through out-of-school programs

Advice for Future Students

• When helping launch a brand new youth program, flexibility and open-mindedness are both key qualities.
• Take advantage of opportunities to network and partner with other community organizations and nonprofits.

Andy Roddick Foundation: Expanding Learning Opportunities

By: Mandy Ackerman

My main responsibility at the Andy Roddick Foundation was to assist the program team with the development and implementation of the Foundation’s pilot of the 5-week summer learning program focusing on STEM themes, physical fitness, healthy eating, relationship building and literacy. In order for the camp to run, I played a huge role in scheduling activities, creating community partnerships and developing administrative procedures. The summer program served over 70 low-income children in grades K-5th at Pecan Springs Elementary School in East Austin completely free of charge. Many of the children attending the school would have not have been able to afford a high quality summer learning program otherwise.

Practicum Highlights

• Teaching students about “My Food Plate”, healthy eating portions and how to plan a nutritious meal!
• Watching the students develop and grow throughout the summer, especially in their literacy, relational and health knowledge skills

Teaching a lesson on My Food Plate, during the camp’s “Health and Wellness” week.

Photo Credit: Priscilla Sanchez
In addition to many health benefits from breastfeeding, it has been estimated that if 90% of US infants were exclusively breastfed for 6 months, the US would save $13 billion/year in healthcare costs. (Pediatrics, 2010)

Special Project:
- Created a card to distribute to Austin moms to help them assess if they need breastfeeding help with phone numbers and websites for assistance
- 6,000 cards will be printed to distribute to safety net clinics and hospitals in English & Spanish

Lessons Learned:
- Say yes to every opportunity during your practicum for the best, most unique experience.
- In public health, our job is never complete—which makes it hard to leave the work behind on weekends and evenings.
- It’s important to find a way to leave it behind for your own well-being.

IT TAKES A VILLAGE TO SUPPORT BREASTFEEDING MOMS
By: Amy Brandes

For my practicum, I worked with the Austin/Travis County Health and Human Services Department in the Chronic Disease area. Specifically, I worked on one objective as part of the Community Transformation Grant. That objective was for health clinics to support patients with breastfeeding up to 1 year.

I was the 4th UTSPH student to participate in this practicum. The others initiated a work group, created a sample policy & guideline for the clinics & produced online education for the clinics.

I worked on marketing tools & a communication plan. I prepared a card for clinics to give moms to determine if she needs breastfeeding help and who to call if she does. I also created a pamphlet to advertise the online education to clinics & created a PowerPoint summarizing our work for the Breastfeeding Summit in Austin this August.

HELPING MOMS MEET THEIR FEEDING GOALS

At this point in the project, most of the work done on the breastfeeding portion of the Community Transformation grant is assuring a competent public health & personal health care workforce.

Austin/Travis County is looking for opportunities to educate the safety net clinics regarding the benefits of breastfeeding and the role the clinics have to support breastfeeding moms. Austin/Travis County will present at the Breastfeeding Summit in hopes of motivating clinics to adopt breastfeeding supportive policies & to use the PowerPoint to educate their own associates on how to care for breastfeeding moms.

The card created helps the clinics know where to send moms for additional breastfeeding help. Sometimes being competent means knowing where to send a client for more assistance.

The Austin/Travis County Health Department is committed to helping all moms meet their own breastfeeding goals.

Breastfeeding is best for the environment too—no packaging, no water used & no waste.

Graphic Courtesy of http://www.amadori.org/breastfeeding/art/html/frames/framesetall.htm
Improving Nutrition in Migrant Camps

By: Magdalena Hernandez

I worked on helping improve the nutrition in rural migrant camps in Northern India.

As a community development organization, I worked with other interns to conduct a basic health assessment in the camps, which showed a lack of knowledge of basic nutrition, pre-natal and post-natal care, and reproductive health.

Public Health Significance

My practicum contributed to the public health by diagnosing the needs in health education, informing and educating the community, and linking individuals to services.

Throughout the survey that I conducted I was able to understand which health topics we as an organization needed to discuss within the migrant camps. Through the use of videos and hands-on activities I was able to fully engage all members of the community in discussion of these topics- some which are a bit controversial, such as reproductive health.

I also worked with government officials to discover government schemes which could help improve the nutritional status in the camps.

I worked with the individuals in the camps to register them for ration cards which provided with cheaper food, such as rice, beans, and flour.

I also conducted various health education workshops in the camps, which were highly enjoyed due their technology component.

Through the support of my organization I was able to empower the individuals in camp to seek governmental services which are offered to them.

It was really rewarding to go through the tiring process of obtaining ration cards for the migrants, which contained a lot of problems since they were migrants. Thankfully everything worked out and now they have access to cheaper food, which should help in improving nutrition among the camps.

Advice for Future Students

• Working with government officials in India is very complex, especially in rural areas where there is a lack of personnel for the various services. I would tell future interns to just be patient, sometimes some things work out, and others don’t.

Nutrition video from UNICEF which I used in my lesson about nutrition.

Special events

• Successfully obtained ration cards for 30 individuals
• Conducted workshops on pre-natal care, reproductive health, and nutrition and farming
• Enrolled 10 girls in primary and secondary school

Demographics displayed at Chief Medical Officer Office at Zonal Hospital in Dharmshala, Himachal Pradesh.

Summer 2014 • Magdalena Hernandez • Himachal Pradesh, India • Nutrition
Public Health Significance

My practicum experience related to the following Essential Services of Public Health:

- **Monitors** health status to identify community health problems.
- **Informs, educates, and empowers** people about health issues.
- **Assures** a competent public health and personal health care workforce.
- **Researches** for new insights and innovative solutions to health problems.

The Prevention Research Lab at the University of Texas at Austin conducts research focusing on health and risk behaviors among adolescents and college age students.

Research findings from this study can be used to produce cost-effective and sustainable public health policies and programs.

Overall, health research can lead to improvements in healthcare and public health by providing important information about disease trends and risk factors, outcomes of public health interventions, and more.

Outdoor Advertising/ Public Health Research

Every year, BILLIONS of dollars are spent to advertise unhealthy products including fast food, alcohol and tobacco products to the public. While recent research has shown that fast food, alcohol and tobacco advertising in periodicals and television are linked to overweight, obesity and other harmful health behaviors, there is limited research that investigates the influence of outdoor media advertising on health status.

The Outdoor MEDIA II project will document point of sale ads in three counties: Austin (Texas) as well as Merced and Santa Clara (California). The study aims to determine whether fast food, alcohol, and tobacco media advertisements differ by county? Race/ethnicity? And socioeconomic status?

As a graduate research assistant, my duties included: conducting literature reviews, attending project meetings, preparing progress reports, supervising undergraduate research assistants, and composing/revising a data collection tool to be used for future data collection on outdoor advertising.

Special events/ duties during your practicum

- Completed several community visits to compare and contrast media outlets.
- I learned how to use two new computer programs, ArcGIS and FileMaker Pro.

Advice for Future Students

- Take the initiative to reach out to those who work in your field of interest.
- No one is born an expert, take the time to learn about the topic(s).
- Don’t be afraid to ask for help.
- Stay organized and be aware of deadlines.

Refugees and Recreational Needs

Recreational Needs & Barriers Experienced by Refugees

By: Amy Hoskins

Texas is the top destination for refugees arriving to the U.S., and Refugee Services of Texas (RST) provides resettlement services to many of them. RST asked me to study the recreation needs and barriers experienced by newly arrived refugees residing in Austin. RST recognizes that recreation is an important component of community integration, health, and well-being. They recently created the Explore ATX program that matches a refugee with a volunteer to assist them in exploring the Austin community.

First, I conducted a literature review and developed an interview guide. Then I interviewed adult refugees from Bhutan, Burma, and Iraq and gathered data on their recreational experiences. Lastly, I created a report on the findings and made recommendations for the Explore ATX program.

Public Health Significance

This practicum was related to the following Essential Services of Public Health: research, educate, and empower. The majority of my practicum involved research. This included developing, implementing, and analyzing one-on-one interviews that obtained both quantitative and qualitative data on a subject that was lacking research. Upon completion of interviews, I educated clients on recreational activities in their neighborhoods. At the end of the summer, study participants attended a picnic in their community. They met volunteers at their apartment complexes and traveled together on the bus to the park. Ideally, the park visit and bus training will empower clients to travel to the park on their own in the future.

RST provides other essential public health services. These include the following: mobilize community partnerships and action, link people to needed personal health services, and assure a competent workforce.

Highlights

- The privilege of hearing the stories of newly arrived refugees and being welcomed into their homes.
- A picnic for staff, volunteers, and research study participants at Mueller Lake Park.

Advice for Future Students

- Create a detailed timeline and stick to it. Don’t forget to build in time for unexpected delays.
- Choose a practicum site where you’d like to work. You might receive a job offer.
Acute pesticide exposures in Texas

Non-occupational pesticide exposures reported in Texas, a descriptive analysis.

By: Katherine Kantzes

I worked for the Texas Department of State Health and Human Services, in the Epidemiology and Toxicology section. Specifically, I worked with the Department’s PEST Program to address a gap in their knowledge. Occupational exposure to potentially-toxic pesticides has been documented, but non-occupational calls to the Texas Poison Control Network had not been examined.

I worked with two senior-level epidemiologists and a partner with the TPCN to tabulate and examine differences within the non-occupational exposures, and provided a report at the end of the project.

My final product was a descriptive analysis which examined age, severity, and other variables related to pesticide exposures in Texas. The majority of calls were regarding children, yet an even greater majority (over 90%) could be classified as “non-serious” events.

Public Health Significance

The Public Health Essential Service(s) (PHES) that most closely relates to my practicum experience is research and investigation of a potential public health problem.

My project in particular looked at an issue that is widely assumed in the public to be highly toxic and threatening - acute pesticide exposure. I investigated who was exposed, in what situations, and whether or not these exposures represented a serious public health problem and to whom.

Descriptive analyses of problems like these are common in DSHS, and are efforts to direct resources towards public health issues if warranted. In this case, my analyses might actually help to dissuade fears about acute pesticide exposures, as so few of the calls resulted in serious consequences.

Advice for Future Practicum Students

Embrace ambiguity. This project did not have clearly defined scope or steps at the beginning. I found that if I kept the overall goal and purpose of the project in mind, I was able to take small steps each day towards a rewarding experience and a quality report for my practicum site.

Special events/duties/highlights during your practicum

- I networked with senior level state employees
- I learned how to use Microsoft Access to create complex queries

Although few exposures resulted in severe outcomes, it’s still important to protect kids from potentially fatal harm by appropriately labeling and storing chemicals. (photo courtesy of healthykids.org).
Public Health Significance

My practicum gave me experience with the Essential Public Health Services to “inform, educate and empower” as well as to “mobilize”. These functions of public health are very closely related to the mission of IT’s TIME TEXAS – the mission, to create a cause, is a unique and extremely valuable one in the field of public health because social empowerment and education link the research and diagnostics involved in defining disease to policy change. As a student of health promotion I find this to be the most thrilling and crucial step to effectively making public health change. An educated, informed and empowered public, mobilized for a common cause can have great power to influence both corporate and governmental policies that, in turn, provide the structure for a healthier community.

IT’s TIME TEXAS has successfully built relationships with organizations such as H-E-B and Blue Cross Blue Shield of Texas. It has been very valuable for me to see the ways in which these important relationships are nurtured and maintained.

Special events

- The IT’s TIME TEXAS SUMMIT brought together health advocates in a 2-day inspirational and educational conference
- The Summit was a great opportunity to see the reach of the organization throughout Texas

Advice for Future Students

- I’d recommend jumping in head first and taking initiative at your practicum – the practicum is a chance to get real world experience in a field that you see yourself in. Take full advantage!

Promoting health in a community near you.


Provide a descriptive TITLE here (What would the article title be?)

By: Kelli Lovelace

IT’s TIME TEXAS (ITT) is a non-profit in Austin whose mission is to empower people to live healthier lives and build healthier communities. The organization has built and continues to grow their cause by bringing together a community of empowered individuals and organizations to create and support a social change movement throughout Texas.

The projects at ITT address nutrition and physical activity in both youth and adults.

The project I worked on during my practicum was the development of a mobile phone app that will be instrumental in helping to grow the social movement among individuals in Texas communities. The app will help to link users with opportunities to be healthy nearby and hopefully increase demand for such activities.


Summer 2014 • Kelli Lovelace • IT’S TIME TEXAS • Project Development
Communication is Key

An Epidemiology Coordination Plan for the Ages

By: Blaine Mallon

The state of Texas is one big state, therefore a three tier system is in place for health departments (local -> region -> state). Even though we have so many health departments, every department has their own methods to achieve the same result.

This coordination plan was designed to be used as a guideline so that everyone is on the same page. Lessening the time gap for information is extremely important. This plan also eases the burden of surge capacity, so when a department needs help during a major outbreak, they know who to call and what resources are available.

We had a total of four meetings across the state with many representatives from various health departments. Each meeting built upon the last in regards to what should be in the plan.

Public Health Significance

This practicum was highly involved in developing a new plan to coordinate all efforts regarding infectious disease epidemiology of health departments within the state.

I worked in the Emerging and Acute Infectious Diseases branch, specifically in the Infectious Disease Control Unit. This unit monitors all infectious diseases and deploys resources as requested by regional and local health departments. There are many different genres of infectious diseases including food/waterborne, respiratory, vaccine preventable, etc.

This coordination plan could be a very important resource to health departments. The key to coordination is good communication, especially during a large outbreak where time is of the essence. A healthy Texas is a happy Texas!
Public Health Significance

My practicum experience was part of a larger grant-funded research project, “Activate Ya!”, so one essential Public Health service that my practicum site provided was research for solutions to health problems. The host organization in Uruguay that worked in collaboration with the research project was The Center for the Investigation of the Epidemiology of Tobacco (CIET), an organization also contributing largely to the Public Health service of research.

Furthermore, my practicum site aimed at mobilizing community partnerships in Uruguay to identify and solve health problems in a sustainable way, in this case, preventing youth smoking by increasing physical activity, school connectedness, and supervised time after school.

Increasing Physical Activity and Preventing Tobacco Use Among Adolescents

By: Irene Parobii

While in Montevideo, Uruguay, I assisted with the implementation of an after-school program for middle-school aged youth. This program took place in 2 different schools and involved facilitator-led physical activities, icebreakers, and activities to build connections between students.

Student physical activity was measured before the start of the program by the use of accelerometers, which were worn for a week. Students also wore accelerometers for a week during the implementation of the program. In addition to aiding facilitators with the activities, my duties also included initializing accelerometers and distributing/collecting them from students. I also helped with the distribution of self-report surveys on physical activity and tobacco use. In addition, I am working to enter and analyze accelerometer and survey data that will be used to evaluate the program.

Special events/duties

• Students also worked on a mural project during the after-school program, and it was wonderful to experience the planning process as well as student involvement with painting!
• Having a hands-on role with this program and getting to interact with students was very special.

Lessons Learned

• It is okay to be flexible! There are many elements to public health work that require patience and flexibility, especially when adapting a program in a global setting.
Perinatal Hepatitis B Prevention

Practicum Highlights

- I identified over 30 pregnant women who were not already in the perinatal hepatitis B program.
- My response rate from the healthcare providers was above 90%.

Advice for Future Practicum Students

- Take every opportunity to sit in on meetings or learn what it is like to have the job you want to have to see if it is something you could see yourself doing and enjoying.

Identification of Pregnant Women Diagnosed with Hepatitis B

By: Hailey Rucas

In my practicum, I worked with the Infectious Disease Control Unit within the Texas Department of State Health Services to identify pregnant women who tested positive for hepatitis B and refer them to the perinatal Hepatitis B program through the state.

Hepatitis B is a reportable disease in the state of Texas so any labs that come back positive are put in a database at the health department. Many of the labs are coded to designate the person is pregnant, but many others are not. My job was to call the healthcare providers listed for the positive lab results with no information about pregnancy to determine the pregnancy status of the women. The list of women was given to the perinatal program.

After, I looked into the trends of the data.

Public Health Significance

The Public Health Essential Service (PHES) that aligns the closest with what I did at my practicum are monitor and link. Since I identified pregnant women throughout Texas, I was helping to identify community health problems. By referring the pregnant women to the perinatal hepatitis B program, I was “linking” them with the services they needed in order to prevent the transmission of hepatitis B to their children.

It is important to public health to stop the spread of disease to protect the population. If the baby develops chronic hepatitis B, which is much more likely the younger hepatitis B is contracted, he or she will have the opportunity to spread it to other people and have to suffer from chronic hepatitis B.

The Infectious Disease Control Unit is responsible for monitoring infectious diseases and investigating outbreaks to prevent transmission within the state of Texas.

Make sure to check your hepatitis B status when you are pregnant. Protect your baby.

Addressing the Lack of Adequate Oral Care in the Intellectually Disabled Population

By: Bhumit Shah

My internship this summer was at Special Olympics International. The focus of my project was on the evaluation of the oral health program called Special Smiles. The program is conducted all across the United States. The oral health issues among the intellectually disabled are greater than among the general population. Due to this disparity, Special Olympics provides free screenings during sporting events as well as partnering with dental care providers to provide treatment for the issues detected during the screenings. I evaluated the cost benefits of the program, and I found that the money that can be saved by providing the free screenings, and basic tips on proper brushing leads to potentially millions of dollars in savings. The results show that investing in health promotion and prevention can lead to savings.

Public Health Significance

The Public Health Essential Services play an important role in the work that I do at Special Olympics. Of the 10 main services the following are the ones that play a significant role. Monitoring the health status of the intellectually disabled community is one of the major roles of the organization. It helps to guide the advocacy and programming efforts of the organization. Informing, educating, and empowering both the intellectually disabled and the general population. These efforts help to create an environment that supports change that may reduce the disparities with the intellectually disabled population. Mobilizing community partnerships to solve health problems is also a major role played by Special Olympics. For example, partnering with medical/dental care providers to offer free services. Research and evaluation play an important role as well where I worked during my internship. We work to collect and analyze information, and then use it to offer solutions and guidance.

Special events/duties during your practicum

- I had the opportunity to meet with Dr. Steve Corbin, a major influence within Special Olympics, and one time Chief of Staff for the Surgeon General
- Also, meeting with Dr. Timothy Shriver, he is the son of Eunice Kennedy Shriver, the founder of Special Olympics, and one of the leaders within the organization.

Advice for Future Students

Persistence is the key to success. On the same token you have to avoid being obnoxious. Also, build relationships before you need help. People are more likely to help when you know you.

Volunteer providing dental services during a Special Smiles event.

Patient Handoff Research

Does standardizing the handoff process help?

By: Daniel Thomas

I joined the Patient Handoff Team at Seton Family Healthcare. Their goal is to promote a standardized handoff tool called DRAW. My task was to conduct seminal research in the field of patient handoffs.

Miscommunication during patient handoffs lead to patient safety issues and is a concern nationally. The belief is that standardizing the handoff process will limit these adverse outcomes.

This summer I hoped to conduct research highlighting the effects of standardization on handoffs. My role was to develop and take a proposal from conception to fruition. As with most research, we hit a few snags along the way. My final product for the Handoff Team is a document listing the work done to date on the project including the proposal and all documentation once authorized. I am continuing my work with the team to complete the research post practicum.

Special events/ duties/ highlights during your practicum

- First-hand experience with change management
- Networking opportunities among stakeholders in the hospital

Public Health Significance

My practicum covered many of the essential public health services:

- A purpose of the handoff team is to diagnose and investigate patient safety issues caused by poor handoffs.
- The handoff team also educates all new associates on the use of DRAW.
- They assure that associates are knowledgeable and equipped with DRAW.
- Another goal of the organization is to evaluate the effectiveness of the tool.
- This is where my research came into the picture. My goal is to provide one of the first studies that show quantifiable evidence that standardizing the patient handoff impacts the ability to provide an adequate handoff.
- These essential services provide the patient population a reduction in the incidence of adverse health outcomes due to miscommunication between healthcare providers.

Lessons Learned & Advice for Future Practicum Students

You can plan all you want, but many times events occur that are unexpected. This is true of the public and private sector. The key is to roll with the punches and continue working hard.

Patient handoffs are similar to a baton handoff. When transferring care of one patient to another, healthcare professionals must exchange a breadth of information to ensure that the patient has a safe experience.
Feeding Low-Income Children Across America

By: Ileana Chapa

This summer I had the opportunity to experience the process of implementation and promotion of two of U.S. Department of Agriculture’s child nutrition programs: The Summer Food Service Program (SFSP) and the Seamless Summer Option (SSSO—for school authorities only).

During this experience, I worked closely with the Food and Nutrition Service Director of the Brownsville Independent School District. My preceptor was Dr. Rose Gowen, one of Brownsville’s City Commissioners at large who is very involved in the promotion of health programs and events for the city.

I contributed with feedback and suggestions in order to increase program coverage for children next year and provided feedback on the school’s summer menu in order to create awareness about the advantages as well as areas of improvement regarding school meals.

Public Health Significance

The mobilization of community partnerships and action to identify and solve health problems was the essential public health service that I relate to most from my experience. In order to ensure that children in need are being targeted and that healthy meals are being provided, local authorities and community organizations need to be aware of the issue low-income children and teens are facing and create partnerships to promote health by providing free healthy meals.

Some of BISD’s partnerships include: Parks and Recreationsto reach children through their summer programs; UT School of Public Health Brownsville Regional Campus to increase awareness through media advertising; and City Commissioner Rose Gowen to encourage support from other local authorities, among others.

Special event during my practicum

- I attended “Ladders of Opportunity” an event hosted by Brownsville Mayor Tony Martinez and the City Commission where government officials from the U.S. Department of Agriculture (including Audrey Rowe - Administrator of Food and Nutrition Services) were present to discuss partnerships to improve the SFSP coverage as well as to discuss and learn about federal programs to assist business owners, farmers, ranchers, children and others.

Lessons Learned

- It is difficult to get everybody to cooperate fully in helping programs such as these.
- The school district administrators are willing to make changes if enough support is provided from the community and organizations.
**Mosquito Trap Database**

**Practicum Highlights**
- Attended an American Red Cross Shelter Fundamentals training course to prepare on how to operate, maintain, and close a shelter during a disaster.
- Attended the South Texas Hurricane 2014 Conference to network and interact with DSHS, ARC, TCEQ, Fire and City Health Departments

**Advice for Future Students**
- Always ask questions to several public health professionals and community leaders to expand your knowledge and resources
- Network and communicate with as many public health organizations for opportunities
- Remember to have fun and that everything is an experience

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**A Database to Quantify and Identify Mosquito Species in Cameron County for the Past Decade**

**By: Angel Guevara**

My practicum site was the Cameron County Department of Health and Human Services under the guidance of the Chief Epidemiologist and Public Health Preparedness Program Director.

The public health issue I addressed was the need of creating an electronic mosquito trap database after Cameron County had a Dengue Fever outbreak in November of 2013.

I began to create a mosquito trap database at the department by detailing a quantitative and identification of mosquito species from ten years of trap records and lab results of possible mosquitoes carrying diseases from May 2014 - July 2014.

By creating a mosquito trap database, the department will be able to identify patterns, alert the community of potential mosquito born diseases, and enter/edit new data more efficiently. The final product is a mosquito trap database that can continue to built upon.

4. A research tool for analyzing emerging mosquito-borne disease outbreaks locally and how they relate to national mosquito-borne disease outbreaks and research potential vaccines.

Utilizing my database, public health professionals can analyze the quantitative and identification of mosquito species to a specific time period. If there’s a significant rise in a mosquito population, we can alert the public early to take precautions and prevent an outbreak.

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**Public Health Significance**

My practicum experience relates to the following Essential Services of Public Health:

1. Monitoring mosquitoes by year, month, species, and amount present across the county based on traps set weekly. In addition, know if this is local or a travel acquired disease.

2. Diagnose and investigate cases of individuals who may have mosquito-borne diseases.

3. Inform, educate, and empower the population on how to prepare, prevent, and understand mosquito-borne diseases.

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**Photo Credit:**

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**Summer 2014 • Angel Guevara • Cameron County Department of Health and Human Services • Mosquito Trap Database**
Parent Wellness and Health

Parent Choices in Health and Wellness at IDEA
By: Alessandra Jiménez

IDEA Public Schools has recently made an effort in improving the health and wellness of students and the community at large.

To extend the goals of this organization parent health habits were assessed, health activities, recommendations on how to improve health habits were included in weekly newsletters, and IDEA worked in partnership with community organizations to adopt a family obesity reduction program called MEND.

Post implementation progress was not measured to assess change overtime, but demonstrable changes are anticipated in scheduled assessment for the upcoming school year.

Evaluation of parent health habits resulted in the following of parents surveyed.

1. 17.5% exercised with their children three or more times a week
2. 7.4% parents consumed vegetable three or more times a day
3. 35.6% of parent drank no sodas in the week the survey was completed

Public Health Significance

**Monitor/ Evaluate:** Time spend at IDEA Public Schools was spent monitoring the health habits of parents and sought to change the habits by including recommendations and activities in the weekly parent newsletter.

**Inform Education and Empower:** Lists of activities that could be done in school and in the community were provided in the weekly newsletters and a summer activity list that were regionally appropriate and included in the summer wellness magazine.

**Mobilize:** A program was adopted to help with identified problem of childhood obesity in schools by providing classes to parents and families that would improve their health and that of their children.

Parents participated in the health fair and 5K scheduled in March 2014.

Special events/ duties during your practicum

- Organizing the MEND program to begin in our lower RGV region
- Understanding the habits of IDEA parents through their completed parent surveys

Advice for Future Students

- Be very focused when expressing your practicum’s goals. It will give your time purpose and your success measurable.

Picture was taken by Elizabeth Garcia a parent of IDEA students and Farmer at IDEA Frontier in Brownsville, TX. IDEA parents, children, faculty and staff routinely participate in farm activities.
Wellness Center and community mobilization projects

By James Bowen

I worked on three projects:

1) Quality assurance survey
This will be used to gather Wellness Center client feedback.

2) Client utilization study
I analyzed Wellness Center client utilization by entering appointment scheduling data into Stata (no-shows, cancellations, peak times, appointment types, etc.). Major findings: clients that schedule online are less reliable than clients that schedule via phone; and appointment demand between 5-6 pm is exceeding supply. These insights should improve scheduling, the client reminder system, and client access to care.

3) Community mobilization
Gay City is currently using a community mobilization grant from King County Public Health to fund their #myHIVmoment social media campaign. I gathered and organized hundreds of photographs and comments from everyday individuals for use in the campaign. The campaign can be found at myHIVmoment.org.

Essential public health services rendered

1) Quality assurance survey
Evaluate effectiveness, accessibility and quality of personal and population-based health services.
Assure a competent public health and personal health care workforce.

2) Client utilization study
Evaluate effectiveness, accessibility and quality of personal and population-based health services.

3) Community mobilization
Inform, educate and empower people about health issues.
Mobilize community partnerships to identify and solve health problems.

Advice for future practicum students

Because my practicum was self-designed, my intended final products changed dramatically after I arrived at Gay City Health Project and was better able to assess the needs of the organization. While this initially worried me, my faculty sponsor provided reassurance that modifying one’s goals is fairly common after arrival at a practicum site.

Side projects and other tasks

- Assisted with medical records data analysis and reporting to King County Public Health.
- Attended collaborative meetings with King County Public Health to provide input on potential implementation of electronic kiosk system for registering Wellness Center clients.
- Researched HIPAA-compliant web-based client self-scheduling software to improve health care accessibility and preserve privacy.
Can Pediatricians Help Prevent Bullying?

Practicum Goals

- Learn about public health insurance for children in TX, including CHIP and Medicaid
- Learn methods for qualitative research
- Analyze data and help write manuscript for study- Can Pediatricians Prevent Bullying?

Lessons Learned

- Tackle projects that are intimidating. I was both excited and intimidated at the thought of writing parts of the manuscript, but it turned out to be a great learning experience.
- Ask for help when you need it. Your community preceptor is there to help you, and it will save you time in the long run.

A Collaborative Approach to Bullying Prevention

By: NIA JONES

This summer, I worked on a qualitative research project in the Division of General Pediatrics at UT Southwestern. The project focused on analyzing data from focus groups conducted with the parents of adolescents. 3 groups of parents were interviewed: parents of bullies, parents of victims, and parents of children uninvolved with bullying. I spent most of my time on 2 tasks: learning the methods of qualitative research and applying that knowledge to actual data sets. By the time the summer was over, I was able to finish a draft of the results section of the manuscript and a draft of the introduction section of the manuscript. Also, at the conclusion of my time, I felt well equipped to conduct qualitative research in the future.

Public Health Significance

The Public Health Essential Service that most closely relates to my experience is “research for new insights and innovative solutions to health problems.” This is directly related to my project because my goals were to learn about and contribute to research. For example, the results of the study I worked on will add insight on what parents think pediatricians should be doing to prevent bullying. This insight may help shape guidelines for how pediatricians approach the subject with families.

The research done in the Division of General Pediatrics is at the intersection of medicine and public health. Many of the physicians conducting research in this division are both clinicians and principle investigators for various studies.
The BVM Effect

The BVM Effect: Airway Management in Out-of-hospital Cardiac Arrest

Christopher Leba

The most appropriate airway management strategy in the treatment of out-of-hospital cardiac arrest (OHCA) remains to be determined. We reviewed recent literature regarding the association between the types of airway management used in OHCA and survival to hospital discharge.

The majority of the research reviewed regarding the care of the patient suffering from OHCA indicates that survival is improved in those patients receiving bag-valve mask (BVM) ventilation rather than advanced airways. This “BVM effect” appears to persist despite variations in geographical region, patient population, and CPR quality. We recommend that a prospective randomized study be conducted in the prehospital setting in order to explore this finding and its causation.

Public Health Significance

This project related to several of the components of the Essential Services of Public Health.

As a research project, the practicum experience endeavored to reach new insights into OHCA airway management, particularly the presence and nature of the “BVM effect.”

This was a vehicle to evaluate the effectiveness of different airway management adjuncts currently being implemented in prehospital cardiac arrest in different communities.

We hope our findings will be instrumental in promoting further research and possibly future changes in prehospital guidelines that can improve OHCA patient survival. Through its widespread presence, the “BVM effect” is a significant phenomenon that warrants further investigation and analysis.

Practicum Highlights

- Worked as an integral member of the research team in all steps of the project.
- Actively applied multiple disciplines of public health (particularly biostatistics) during the length of the practicum.

Lessons Learned

- Be flexible and adapt to unforeseen circumstances. Do not get discouraged if obstacles arise. Stay the course!

The BVM is a basic airway adjunct capable of ventilating a patient quickly and effectively.

http://commons.wikimedia.org/wiki/File:Ambu_Bag_valve_mask.jpg
**Tobacco Cessation in Dallas**

**Studying the Effectiveness of Mobile Apps to Increase Smoking Cessation Rates**

*By: JIESU LEE*

During this summer, I worked to reduce tobacco smoking in the Dallas community. I completed my practicum at the Businelle and Kendzor lab studying the effectiveness of a mobile phone app in reducing smoking relapse.

My job included screening for eligible participants, collecting data, and performing data analyses for previous studies in regards to tobacco cessation and health behaviors.

The final product I will produce will be a poster and perhaps a research paper that talks about the effect that sleep quality at quit date has on the smoking relapse rate at weeks 4 & 12 after quitting. It seems that better quality sleep is correlated with higher probability of success in quitting smoking.

**Public Health Significance**

My practicum experience was related to monitoring the general health statuses of the Dallas community, informing/educating & empowering people about tobacco cessation, linking people to needed tobacco cessation and health services, evaluating effectiveness of different cessation interventions as well as researching for new insights into tobacco cessation.

Most essentially, this practicum showed me how clinical research is used to assess whether a new tobacco cessation intervention program increases the success rate such that physicians and tobacco cessation professionals can gain useful tools to help their patients more effectively. Furthermore, no single intervention will be successful for all individuals. Multiple diverse therapies need to be available to reach a broad and large range of people who need help in quitting cigarette smoking.

It was great to see how research is used to gather data that will later be used to provide new education materials to those who want to quit.
Planning for the Future: A Free Clinic Story

By: Leigh Anna Logsdon

The mission of The Agape Clinic is to provide quality health care services to the underserved. Regardless of a patient’s race, ethnicity, gender, sexual orientation, religion, disability, or social class, Agape’s doors are open to all.

In order to help the clinic plan for the future, I joined their Strategic Planning Committee. In this position, I’ve had both clinical and public health responsibilities. As the medical student manager for the Dermatology Suite, I take dermatological histories, examine lesions, present my findings to attending dermatologists, assist in procedures, recruit volunteers, organize the inventory, and keep the inventory up-to-date. As a public health student, I have developed a patient survey and performed a dermatology chart review.

This combined experience has allowed me to witness patient needs firsthand as well as through surveys and charts. These patient needs will help us decide the future areas of growth for the clinic.

Public Health Significance

The clinic and my project share two main goals: (1) understanding how to link people to needed personal health services and (2) assuring the provision of health care when otherwise unavailable. I’ll elucidate how my responsibilities at the clinic are based upon these goals.

Our patient survey was designed to assess patients’ medical needs, medical coverage, preventative health, demographics, use of clinic services, and overall satisfaction of the clinic. This survey will help us determine the barriers and unmet medical needs of our patients.

The dermatology chart review allows us to understand the patterns of patient’s place of birth, diagnosis, procedure, biopsy result, prescription, and follow-ups. This data helps us provide more culturally competent care, prepare for future care, and stock the most needed medications.

While working in the Dermatology Suite, I am directly involved in providing free care to underserved patients. All of these aspects of my summer have been very fulfilling. I hope that they have helped the clinic and its patients.

News:
• July 8: After teaming up with Dr. Mitschke from UT Arlington, we received IRB approval for our patient survey.
• July 29: We have a total of 70 completed patient surveys in English and Spanish.

Advice for Future Students:
• It takes several reiterations to create a survey. It is key to start early, so the survey is written at an appropriate grade level for patients, translated into the appropriate languages, asks the right questions, and obtains IRB approval.
• Everybody can teach you something. While working at your practicum, listen to the patients’, nurses’, and staffs’ experiences. This is essential for community-based research.

I’m standing next to our Dermatology Suite, where we see 12-17 patients each Saturday.
Nutritional Literacy and Knowledge

Assessing Nutritional Knowledge and Literacy Among Food-bank Participants in the City of Dallas

By: Antonio Lopez

Studies show that people with low health literacy have a higher risk of developing chronic illness and malnutrition. The goal of the project was to assess the baseline nutritional literacy (NL), nutritional knowledge (NK), and health/weight perception of food-bank clients from Crossroads Community Service and North Dallas Shared Ministries in the city of Dallas.

Three surveys were administered to each participant. The results show that food bank clients have low NL and NK. There are no differences between Food Stamp Participants vs Non-participants (P=.068 for NL and P=.962 and NK). There were no differences when clients were compared in terms of previous nutrition classes (P=.565 for NL and P=.332 for NK).

Public Health Significance

Diagnose and investigate: a complete characterization of food-bank clients in general, and Food Stamp Program/Supplemental Nutrition Assistance Plan participants in particular had yet to be conducted with regards to nutritional knowledge and literacy.

Monitor: health and weight perception of food-bank clients from Crossroads Community Service (CCS) and North Dallas Shared Ministries (NDSM) in the city of Dallas was measured.

Develop policies and plans: thanks to this study a nutrition education program would be created. We not only will base it on the results obtained, but also on the resources available at each of our partner sites. Information was also collected with regards to the types of nutritional programs some of our participants had receive at other organizations, this information can provide us with some examples for methods to avoid.

Practicum Highlights

- Had the opportunity to create and translate surveys.
- Learned the IRB approval process.
- Developed long term relationships with community partners.

Advice for Future Practicum Students

- If you are starting a project form scratch make sure you complete all the necessary paperwork for IRB approval on time.
THE BRIGHTERBITES PROGRAM: A Fruit and Vegetable Intervention

By: Saundra Nguyen

For my practicum, I worked with the BrighterBites pilot program in Dallas: learning about program planning and implementation, coordinating a food drop site at a local community church, and conducting a program evaluation to assess the impact of the 7-week summer program.

BrighterBites is a fruit and vegetable program that aims to impact eating behavior among predominantly low-income families by introducing them to a routine distribution of fresh produce, along with corresponding education and a “fun food experience”, ultimately helping to curb the childhood obesity epidemic.

My duties included attending meetings with BrighterBites and the North Texas Food Bank, preparing weekly recipes, developing a survey, and evaluating the impact of the program.

PUBLIC HEALTH SIGNIFICANCE

The BrighterBites Program seeks to inform, educate and empower low-income families about the nutritional health benefits of fruits and vegetables. The schools and community sites that they partner with are required to implement a nutrition education curriculum (i.e. the CATCH program), and a bilingual handbook is provided to the parents weekly.

In addition, the program mobilizes community partnerships (the North Texas Food Bank) to identify and solve health problems, specifically the problem of food access and nutrition. BrighterBites works with the food bank to get donated produce (or produce at heavily reduced prices). By reducing barriers (cost and availability) and empowering the community with nutrition knowledge, fruit and vegetable consumption behavior can be positively impacted.
Sickle Cell Disease Research

Practicum Highlights

- Seeing patients with a genetic disease being cured.
- Meeting scientists working at the world renowned National Institutes of Health.

Myocardial Iron Overload in Sickle Cell Disease (SCD)

By: Hellen Oduor

I worked at the National Heart, Lung & Blood Institute (NHLBI) in the Sickle Mortality Prevention Lab, under the supervision of Courtney Fitzhugh, MD.

My project entailed documenting the effects of excess iron [from chronic blood transfusions] on the heart in patients with SCD, as well as interventions to reverse these effects. I did a retrospective analysis on a few patients at the NIH.

My duties included abstracting medical records, contacting other healthcare institutions, literature review, and compiling reports of my findings to present to my lab. I wrote a manuscript and presented my findings on a poster.

Outside of my project, I attended clinical grand rounds and meetings, saw patients at the clinic alongside my mentor, attended research conferences, and participated in a journal club.

Public Health Significance

The two Public Health Essential Service(s) (PHES) that most closely relate to my practicum experience are:

- Inform, educate and empower people about health issues.
- Research for new insights and innovative solutions to health problems.

The findings from my project are useful in that they inform and educate healthcare professionals on a topic surrounded by controversy and anecdotal reports. Through my project, I am contributing to a body of scientific evidence that can be applied in clinical practice.

My host organization as a whole contributes to public health by serving as the biomedical research nerve center for the US. Among the many innovations at the NIH, the lab I worked with has found a cure for a genetic illness.

Lessons Learned

[OR]

Advice for Future Practicum Students

- Write down your objectives. Articulate what you want to get out of your practicum from the very beginning. Be proactive.

The National Library of Medicine, world’s largest collection of medical literature. Photo credit: National Institutes of Health

The National Library of Medicine, world’s largest collection of medical literature.

Photo credit: National Institutes of Health

Caption describing picture

The National Library of Medicine, world’s largest collection of medical literature.

Photo credit: National Institutes of Health
Fever Phobia in Community Care Clinics

Addressing Fever Phobia and Fever Management Among Parents

By: Reema Patel

During my practicum, I interviewed 30 parents whose children are patients at three different MyChildren's clinics that are associated with Children's Medical Center Dallas. I inquired about parents' knowledge, beliefs, and concerns about fever along with what available resources are used for fever management.

Physicians at the clinics were also interviewed and were asked why they believe parents tend to utilize the Emergency Department (ED) for fevers and what methods they use in communicating to patients about fevers.

After interviewing patients and physicians, I analyzed qualitative data for the development of public health initiatives and provided recommendations for how to better address fever phobia and fever management in primary care clinics.

Public Health Significance

My practicum experience relates to the Public Health Essential Services (PHES) in terms of informing and educating patients and conducting research. Research is the main service that relates closely to my practicum since I collected data on fever knowledge from patients and physicians.

The Injury Prevention Department at Children's Medical Center Dallas is working to understand fever phobia and reduce ED visits on non-urgent illnesses by providing educational materials to parents and physicians on fever management.

Educational materials include displaying Fever Posters in patient waiting rooms, streaming short videos in physicians’ clinics that depict ways parents can treat fevers at home, and developing a smartphone or tablet app that parents can use to answer medical questions. These recommendations will better address home management of fever in children.

Duties during Practicum

- Researched and gathered data on parents' knowledge of fever management at community clinics.
- Provided recommendations on how to better educate families on fever and fever management.

Advice for Future Practicum Students

- Be patient. Much of research involves waiting and you might not get the data you want right away.
- There is always room to add questions you want to ask during interviews. These additional questions will help you get the most out of your research.

Children's Medical Center Dallas Emergency Department

Picture taken from The Office of the Governor
http://governor.state.tx.us/disabilities/awards/apa_gcpd_accessibility_awards/
Preventing Childhood Obesity

**Healthy Bite, Future Bright! Go BrighterBites!!**

**By: Patil Shilpa**

BrighterBites is a project partnered with the North Texas Food Bank to bring healthy choices into the homes, minds and mouths of the children and their families in the Dallas county area. BrighterBites serves the low income families of the Dallas communities by providing 30 lbs of fresh produce per week for 8 weeks. Along with the produce, we provide nutritional information and recipes for healthy snacks which were provided to the children every week. Such features are thought to be helpful in curbing obesity rates in these communities. As a site coordinator, I take care of the activities like selecting and procuring produce, bagging and distribution. Additionally, I am involved in the program planning for the upcoming school year 2014-2015. Final results of the level of impact BrighterBites had on communities is being determined.

**Public Health Significance**

BrighterBites has substantial Public Health significance, as it is rooted in the belief that if we provide children with something better to “munch on”, they will. And the life they lead will be as vibrant as the food they crave for. Lisa Helfman, one of the founders of BrighterBites realised that by informing children with healthier choices, we can educate and empower them. This is one of the healthier way to prevent childhood obesity, which is a pressing issue in U.S. The program primarily target children in the age groups, who attend elementary or middle school. This is believed to be a perfect age to shape their thoughts. Providing proper information and education along with fresh produce can empower them. Such behavioral lessons make them self-efficacious which will enable them to make correct choices in the future. BrighterBites attempts to do this by removing the socioeconomic barriers of access to quality fresh produce. The program partners with NTFB and Schools to target the issue of obesity and tries to bridge the gaps in the broken food system. Food banks supports in mobilizing sources and the schools enable outreach to the children in ‘food desert’ regions. With help of these partners; program planning, implementation and evaluation becomes possible.

**Our duties - We served**

- Over 200 families per week
- Families enrolled in summer programs with children from ages 4 - 16
- On an average, our population was 90% Hispanic and 7-8% African American

**Lesson learned**

- Having a lofty goal is better than having none.
- Good thought with persistent efforts can become a reality for the better community.

**Nutritional Information Handout**

Every week children receive.
Public Health Significance

My experience with the KidsEat! program matches the 9th Essential Public Health Service: to evaluate health services, by determining the effectiveness of an intervention combining nutritional education and theater, which has not been previously studied in the literature.

My project contributes to public health by demonstrating the effectiveness of an innovative solution targeted to a well-known issue, that of childhood obesity. The KidsEat! program has the potential to multiply its impact by connecting nutrition education of its participants with the peer-to-peer education tool of theater.

Even though South Dallas Cultural Center does not focus on public health issues, they developed the KidsEat! program to address the issue of limited food access in southern Dallas neighborhoods, which leads to reliance on unhealthy options served at convenience stores and fast food restaurants, to increase awareness of the issue and provide education.

Evaluating impact of KidsEat! program on nutritional knowledge, attitudes, and self-efficacy

By: Nessa Philip

I worked at the South Dallas Cultural Center to evaluate the KidsEat! program, a nutrition intervention in which educational activities inspired participant-written theater performances by Soul Children’s Theater Company.

This program was aimed at curbing childhood obesity in southern Dallas neighborhoods through hands-on activities dealing with healthy eating.

To evaluate the program, I adapted pre- and post-test surveys and conducted a focus group to determine whether the program increased nutritional knowledge, attitudes, and self-efficacy. Results showed that the adolescents had improved attitudes and self-efficacy toward healthy eating after the program.

I created an oral presentation, abstract, executive summary, and poster as part of my work.

Lessons Learned

- Find a project or work site that you’re passionate about, instead of worrying about convenience. This experience can help you discover what you love about public health and create lasting partnerships and community networks to help you in future projects.

South Dallas Cultural Center empowers the community through local partnerships and arts programs.

Dallasculture.org/SDculturalcenter

Watching Fed Up (2014) had a shocking impact on the kids. While watching, they stopped drinking their sodas and eating popcorn.

CBC News

Special events/duties during your practicum

- Viewing and discussion of the documentary, Fed Up
- Conducting a focus group with their caregivers

Summer 2014 • Nessa Philip • South Dallas Cultural Center • Nutrition Program Evaluation
Public Health Significance

My main syndromic surveillance projects directly relate to PHES #1 (Monitoring health status) as queries are constantly being run with the SQL code built to see if there are any unexpected increases in conditions such as “Rash” or that are categorized as Neurological, GI or Respiratory within a particular area, using zip code data.

However, this nicely parallels traditional surveillance methods utilized in outbreak investigations (PHES #2 – Diagnose and Investigate). Epidemiologists contact numerous case patients per day and I was fortunate to observe a few outbreak investigations. These cases are divided between the Foodborne, Vector borne, and Zoonotic teams.

According to the CDC, MERS is associated with a 30% mortality rate and has spread to numerous countries via travelers. Also, drug overdose is now the highest cause of mortality in the U.S., most of these related to opioid overdose. Thus, syndromic surveillance is important in that real-time data can be used to detect outbreaks before traditional surveillance, allowing control measures to be mobilized earlier.

Secondary Uses of Syndromic Surveillance in Public Health

By: Romero Santiago

As a Bureau of Epidemiology intern at the Houston Dept. of Health & Human Services, I was responsible for building Sequel (SQL) database code consisting of search parameters that I used to query the database of emergency department admissions for rash, MERS, and opiate overdose. For MERS, we first looked at CDC’s SAS code written for Biosense (their surveillance system) as a starting point to identify MERS-indicative search terms. For opiate overdose, we looked at articles & websites to ascertain the various categories of drugs, all classes besides opiates used as exclusion criteria. For our MERS query, about 25 admissions remained where MERS could not be ruled out.

I created MERS and opiate overdose code that can be utilized and refined as case definitions become more specific. I presented my work to the group and wrote a short paper about secondary uses of syndromic surveillance (original use: bioterrorism).

Lessons Learned

• Jurisdiction is critical
• Meaningful use criteria spur expansion of data sharing networks (EHRs & hospitals coming on board)
• Informatics critical to public health’s progress to predictive analytics
• Introducing myself to dept. members helped me involve myself in a breadth of activities to understand public health practice
Tactical Emergency Medical Support (TEMS)

Providing TEMS to Law Enforcement Operations
By: Thomas Schaeffer

My practicum involved the provision of pre-hospital medical care to law enforcement officers during tactical operations. Three aspects allowed me to become better acquainted with this unique theory and practice.

First, I conducted research, producing summaries of approximately 30 academic manuscripts that my mentor and I hope to use to compose a review article of our own.

Second, I attended several training sessions in the DFW and San Antonio areas that taught me basic tactical strategies in regards to caring for patients in austere environments.

Finally, I rode along with members of the Dallas PD, allowing me to observe the challenges that law enforcement officers face on a daily basis.

Law enforcement is a dangerous job, requiring unique medical support.

Public Health Significance

Tactical law enforcement officers provide communities with an important service. In order for medical personnel to keep operators fit and healthy, several essential public health services must be realized.

Community partnerships must be mobilized. This typically includes cross training medical personnel (physicians, paramedics, etc.) so that they may support law enforcement operations.

The policies and plans developed by tactical medical personnel are constantly being evaluated. The research that I conducted this summer will hopefully be used to inform public health officials as to the current status of TEMS, its growing popularity, and potential areas for improvement.

The responsibilities of TEMS personnel include providing tactical teams with preventative medicine and emergency treatment in hostile situations and coordinating plans and strategies with hospitals and traditional EMS. These serve to maintain the operational integrity of the team.
Public Health Significance

- For most countries in the world, a chemical can be manufactured, sold, and used freely so long as no adverse health effects can be demonstrated.
- The burden for chemical exposure then becomes the responsibility of environmental epidemiologists who seek to link chemical exposures to health effects, sometimes requiring decades of follow-up before a chemical is removed from the market.
- Monsanto Corporation, manufacturer of Agent Orange, recently agreed to pay $93 million in fines as a result of contamination, although they still deny their chemical has any link to birth defects.
- BPA has been voluntarily removed from the plastics used in baby bottles.
- PCBs are still used in almost all computer circuit boards, and PCB dust has been found to be present in nearly everyone’s residence. PCB is a suspected estrogen disruptor.

Chemical Contamination of Ecosystems

- Human activities have always released waste into the environment, but in the last century with the advent of advanced organic chemical synthesis methods, novel chemicals with unknown effects contaminate the world’s ecosystems at alarming rates.
- One harmful chemical that has been in the news is DDT, an insecticide first synthesized in 1874 that was sprayed in large amounts throughout the world for malaria and typhus control. DDT has been found to essentially never decompose, and traces of it can be found in all foods.
- A similar compound is dioxin, a contaminant of the Agent Orange herbicide that was sprayed during the Vietnam War.
- The newest environmental contaminants include BPA, a type of plasticizer, and PCBs, a type of flame retardant used in electronics.

Epidemiological Investigations of Biopersistent Exposures

By: Justin Stuart

- Performing epidemiological research as part of a worldwide team is difficult because of competing goals among individual researchers.
- To survive in research such as this, a practicum student has to be patient, flexible, and willing to compromise.

Lessons Learned

- Arnold Schecter, MD, heads up the research division for environmental health at the Dallas Regional Campus.
- My responsibility this summer was to help synthesize several manuscripts for publication in journals.
Public Health’s Significance in Medical Practice

By: Jeffrey Mohlman

During my time in the Society, Community and Individual course at the Paul L. Foster School of Medicine I learned the importance of public health in the practice of medicine. I now know how culture, family and the community can impact an individual’s health. I also understand epidemiology and biostatistics better. Finally, I can now converse a bit easier in medical Spanish. My time in the course prepared me to apply what I learned to various projects.

My Public Health Projects:

- Food Day event to provide education to elementary students about sugary beverages.
- An original epidemiological research project about breast cancer in the Hispanic population.
- El Paso Immunization Coalition—social media organization.

Public Health Significance

My practicum, the Society, Community and Individual course and my projects relate to the essential services of public health in various ways. First of all, my research in breast cancer has allowed me to investigate health problems in the El Paso community. I learned that it takes hard-work and team-work on the individual’s part to take an observation and turn it into quality research that is presentable. I hope that I can continue to enjoy researching important medical and public health topics.

The sugary beverage education course we presented to the elementary school students allowed me to inform, educate and empower people. With childhood obesity rates triple what they were one generation ago, I hope activities like this can make a difference for our nation’s health.

By establishing the social media websites for the El Paso Immunization Coalition, I mobilized community partnerships to identify and solve health problems. We are striving to link the community to useful education and resources to have a healthy, immunized community.

I am thankful for the information learned during the course and practicum. I am glad I had the opportunity to apply some of the principles and essential services of public health in my projects and plan to do so in my future career.

Sugary Beverage Education at Jose Damian Elementary School.

Photo Source: Jeffrey Mohlman

Educating the Public on Sugary Beverages

I presented education on sugary beverages to approximately 100 third graders and 100 fourth graders. Students also listened to each other’s hearts using stethoscopes.

Researching Breast Cancer in the Hispanic Population

- Because of my time learning epidemiology and biostatistics in this course I was able to research Breast Cancer in the Hispanic Population and will be presenting the research in Tampa, FL at a conference.

The Breast Cancer Ribbon

Source: graysanatomycast.info
INFLUENZA TYPES IN EL PASO

Practicum Highlights

- Summarize secondary surveillance data on flu in El Paso
- Analyze flu data by type and demographics in El Paso
- Summarize mortality rates by flu types

Advice for Future Practicum Students

- If possible, make prior arrangements and/or visits to the esteemed practicum site before the practicum time begins. This helps in understanding any other prerequisites that are necessary and must be met before one embarks on the practicum itself.

EXAMINING FLU TYPES & TRENDS IN EL PASO: 2012-2014 SEASONS

By: Alice Nyakeriga

During this summer 2014, I was doing my practicum with the City of El Paso Department of Public Health, (ELPDPH) I worked on summarizing Influenza data from the past two surveillance flu seasons: 2012-2013 & 2013-2014.

The ELPDPH provided me with flu data collected by the epidemiology section to analyze and summarize.

Public Health Significance

Any one season may present various types of flu and this may vary from season to season. The surveillance of flu helps in understanding the information needed for action for various services of Public Health including:

- Assess flu status through diagnosis
- To define objectives for action and priorities
- To timely inform the public
- Application of data to prevent and control flu/disease.
- To evaluate interventions & programs in PH practice, and provide info to plan & conduct research.

My responsibilities involved but were not limited to summarizing the flu data into tables and graphs based on theoretical epidemiological knowledge that I have garnered during the MPH training.

I was able to summarize the data into a report, which I submitted to my community preceptor, Dr. Gonzalez.

The main flu types experienced in the county were types A, being responsible for 48-61% and type B (47.8-34.5%) of all flu cases in 2012-2013 and 2013-2014 flu seasons, respectively. Younger children suffered the highest impact from flu; with mortality being mainly due type A.

Through surveillance of flu in the county, the DHELP is able to prepare in readiness to provide the necessary advice and services to contain flu in El Paso including:

- Diagnosis & monitor flu types
- Identify and evaluate control measures: provision of flu shots and treatment,
- To monitor isolation activities, if needed
- Disseminate data on flu status
Public Health Preparedness Plans

City of El Paso, TX Department of Public Health
By: Hector I. Ocaranza

At my practicum site I was introduced and assigned to a key element of public health preparedness: The Planning.

The existing plans for the City of El Paso Public Health Preparedness required revisions which were aimed at providing a fresh perspective as well as incorporating contemporary elements into the existing plans.

Current times bring new threats to the community and new challenges as to how to approach a specific situation, therefore it is imperative to update current plans to bring them up to speed with times and threats.

I actively participated in the revision of current plans and was involved, along with the division personnel and higher management, in the updating process of such plans to bring them up to date.

I would like to share that no matter how you prepare, there is always room for improvement and lessons to learn from adverse events that would lead to a continuum disaster management circle.

Public Health Significance

The City of El Paso Department of Public Health performs all 10 essential services of public health; however each of the division within the department performs one or several of the services.

The preparedness division, particularly my practicum experience evolved within the development of policies and plans, much needed as guidance in case of a disaster of any nature.

The plan that I enjoyed the most was the Crisis and Emergency Risk Communication (CERC). This plan was redesigned and expanded focusing on delivering specific information during an emergency, paying particular attention to how to reach certain population with special needs.

During My Practicum

- As a student, I felt welcomed and I was able to demonstrate what I have learned during my academic studies to other members of the Department of Public Health.
- Being proactive and helpful without limitations was beneficial during my practicum experience.

Advice for Future Students

- Be part of the team you are assigned to, every person within the team is important and always learn something from every person you encounter.
- Look for a way to contribute something to the team!!
Pain Trends in the Elderly

Pain study in the elderly reveals current pain myths

By: Daniel Ayala

Literature on pain management has described several pain myths present in the population. For example, one myth is that pain is a normal part of aging which is simply not true. Pain is due to pathological processes, which though may occur at higher incidence as one ages, is not a result of aging per se. A few other pain myths include that pain medication is inherently bad, that the elderly cannot reliably report pain, and that pain is “all in the head”.

An objective of this study was to discover current trends in pain management and beliefs particularly in the elderly population.

Preliminary data reveals that pain myths remain widespread and, importantly, is common in many of the participants that were hurting the most.

Though a larger data set is needed, the relationship between inadequate pain management and underlying pain myths should be further explored.

A second phase of the study involves utilizing an intervention and studying its effect on the study population.

Public Health Significance: Essential Services

Key aspects of the 10 essential public health services relevant to include: Investigating health problems, informing, educating and empowering people about health issues, and performing research to discover new insights and innovative solutions to public health issues.

This project was useful in investigating and uncovering underlying belief systems in the elderly population that perhaps are contributing to inadequately managed pain.

A lecture was given at each site as an educational service to the community, to both give an overview of pain management and to help dispel pain myths. Several community members had questions during and after the lectures, showing the level of interest in this area.

Finally, research in this area is useful to gain insight which may lead to relevant interventions that could potentially mitigate inappropriate pain management in the elderly population.

In the community...

- Pain lectures were given at various senior centers in the San Antonio area.
- Elderly community members filled out surveys on pain management and pain beliefs

Advice to future students...

- Have fun! Though some aspects may be tedious, the work that is being done to learn and/or help our communities is well worth the effort.

CDC. 10 Essential Public Health Services.
http://www.cdc.gov/nphpsp/essentialservices.html
Active Living

Speak Out for Healthy Living with the Active Living Council
By: Amanda Merck

My practicum experience was with the Active Living Council of San Antonio (ALC). Working with the Mayor's Fitness Council (MFC), and with support from the San Antonio Food Bank and the Witte Museum, we developed the inaugural Speak Out for Healthy Living town hall event. The purpose of this and future events is to gain public opinion/input regarding issues that discourage or encourage healthy living in their neighborhoods in order to apply strategies from relevant societal sectors of the Active Living Plan for a Healthier San Antonio to address those issues. I developed and analyzed interactive surveys in addition to public input; I compiled data into a report to be shared with the public and with stakeholders; and I created a toolkit to be used in planning future Speak Out events.

Public Health Significance

Through community partnerships, the Speak Out event served to educate people about healthy living opportunities in San Antonio while identifying community health barriers, in order to develop community health plans and policies. My experience most closely relates to the following Essential Public Health Service: inform, educate and empower people about health issues, not only the general public, but also stakeholders and policymakers. The ALC contributes to public health by facilitating and supporting positive change in policy, infrastructure, and attitudes to increase opportunities for active living.


Special events

- Developed Speak Out for Healthy Living town hall
- Assessed and compiled findings into a summary report
- Analyzed event and created a toolkit for future events
- Attended ALC and MFC meetings
- Attended the Public Health and the Built Environment Conference
- Attended TEDxSA Food Policy Salon.

Advice for Future Practicum Students

- Become very familiar with the Active Living Plan for a Healthier San Antonio.
Public Health Significance

Throughout my practicum experience, I was able to participate in providing two of the 10 Essential Public Health Services. The MEND team and I informed, educated, and empowered children and their families in Brownsville. The Project MEND intervention offers families education and information about healthy food choices and exercise habits. This classroom instruction is followed by active play, which empowers children to make healthier choices throughout their day. The MEND team and I were able to train and equip community partners to deliver the Project MEND intervention to those they serve. One of my tasks was to draft a memorandum of understanding between the School of Public Health and the Brownsville Independent School District. This task was among many that were served these two essential public health services in the Brownsville community.

School of Public Health and community partners help families fight childhood obesity

By: Benjamin Silva

Brownsville – I had the privilege to work alongside the faculty and staff at the UT School of Public Health and various groups such as IDEA Brownsville to implement Project MEND. This intervention offers teaching, guidance, and practice to overweight and obese children and their parents on how they can live fitter, healthier, and happier lives.

From day one, my task list was full!

Whether I was preparing supplies, participating in active play at intervention sites, or interviewing parents to help design recruitment flyers, I was fully immersed in the process of community lifestyle intervention delivery.

My recruitment poster design and parent interviews will serve to enable the SPH to expand Project MEND here in Cameron County for years to come!

Lessons Learned [OR] Advice for Future Students

- When delivering community-based interventions, be prepared for anything! Your role may change from day to day, but adapt and you’ll be glad you did.
Developing the research topic at hand required implementing the 1st (monitor) and 2nd (diagnose and investigate) essential services. However, my involvement with this practicum centered on the 10th essential service: research.

By: Nadia Silva

The health care system is aimed at improving patient outcomes and increasing accessibility. The purpose of this practicum and research was to evaluate the role of physician teams in impacting patient outcomes.

We began preliminary work in piloting the PRISm (Physician Relationships, Improvising, and Sensemaking) intervention. PRISm is a communication tool designed to improve how physicians relate to one another, make sense of what is happening, and improvise in uncertain situations. It is specifically directed at briefings before rounds, debriefings after rounds, and the use of STIC (Situation, Task, Intent, Concern, Calibrate) framework.

Initial data analysis has shown implementing the PRISm intervention may actually reduce rounding times. We are looking forward to the results of patient outcomes.

Piloting the PRISm Intervention

Preliminary research took place at the Audie L. Murphy VA Hospital in San Antonio, Texas. http://www.southtexas.va.gov/

Practicum Highlights

This experience allowed me to:
• Take part in primary data collection
• Explore a different side of medicine
• Understand the practical uses of public health and how to apply it in my future career

Advice for Future Students

All students: Search hard for something that really interests you. This can be a fun and enriching opportunity!

MD/MPH students: Don’t be afraid of developing your own practicum. Use this opportunity to really explore how you can apply public health in your future.

Piloting the Physician Relationship, Improvising, and Sensemaking Intervention

The research focused on improving the efficiency and effectiveness in which health care is delivered to patients. This has important implications for public health, as it offers a simple tool that is free to use, easily adopted, and is widely applicable.

Beyond this particular clinical research project, the VA Hospital System is involved in numerous research projects across the nation. The outcomes of the research done here helps to lay the foundation for many public health initiatives.

Public Health Significance

The 10 Essential Public Health Services as used by the National Public Health Performance Standards Program to structure the way health systems are evaluated.

Physician teams play a key role in patient outcomes. Working in a high uncertainty environment requires elements of sensemaking, improvising, and learning to develop these effective relationships.

Image courtesy of Dr. Luci Leykum

Summer 2014 • Nadia Silva • Audie L. Murphy VA Hospital • Piloting the PRISm Intervention
Public Health Significance

Oral and dental cares are essential for the whole body health. Neglecting the proper dental hygiene could result in many complications in the mouth and the rest of the body.

Dental Public Health focuses on the community and works on enhancing the oral health in our society. Some of the essential public health services involved in my practicum:

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Evaluate effectiveness, accessibility and quality of personal and population-based health services.
4. Research for new insights and innovative solutions to health problems.

Access to Dental Care is Impacted by Insurance Coverage

By: Armia Zaki

I am working with my community preceptor, Dr. Cappelli, and his staff, at the UTHSCSA Comprehensive Dentistry department, on a research project exploring the barriers to accessing dental care with the focus on dental insurance coverage.

The project has allowed me to apply research methods that I learned at school into a real life issue in our society. These research methods have proven effective to use to learn about a health issue on a short notice, and to direct further research to resolve the issue.

My involvement in the project will continue even after I finish my practicum at the end of the summer, and I might get a thesis opportunity in the same research track of the project!

Texas Oral Health Metrics Summit

At the summit, I met and interacted with many professionals: dentists, public health professionals, policy makers and dental researchers. It was great to learn that Public Health involves a diverse select of professionals to work on concurrent issues in the society.

Lessons Learned

Through Diversity, different opinions and professional advice highlight the success of Public Health in facing the health issues we have in the society.

Dental Public Health

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South Texas Environmental Education and Research (STEER) immerses health professions students and faculty in the unique culture and environment of the Texas-Mexico Border. Our purpose is to reunite Medicine and Public Health.

Each summer, MD/MPH students from San Antonio head to Laredo and Harlingen to experience first-hand the intersection of public health and medicine through a real world study in environmental health. Read the summaries below to learn about the STEER program through the experiences of UTSPH students.

http://steer.uthscsa.edu/index.aspx
Community Outreach

Overcoming Environmental Obstacles through Public Health

The STEER program, which is short for the South Texas Environmental Education & Research Program, provides an integrative overview of public health relative to environmental factors specific to the Lower Rio Grande Valley.

In this practicum, we had the opportunity to delve into the complicated web of environmental factors that influence the health of a community and learn about the varying roles of public health research, community outreach programs and policy in action in the promotion of public health.

What stood out from the practicum most prominently was the necessity of offering a solution to the community instead of only taking away the problem, like in the case of the Donna Reservoir, where local fishermen relied on their livelihood.

Public Health Significance

STEER illustrates how a community uses all ten of the Essential Public Health Services to effectively assess and overcome adverse environmental factors.

To this end, the essential service of informing, educating and empowering people about health issues most closely relates to the STEER experience.

We had the opportunity to talk to several leaders in the local community about the environmental risk factors that people face in the lower Rio Grande Valley in the form of socioeconomic hardships, lack of services, and pollution.

For my own project, I was able to expand on the topic of air pollution from tire burnings on the US/Mexico border to provide my colleagues and leaders from the community further insight and awareness of the problem and potential solutions.

Advice for Future Students

- Be sure to bring a journal with you so you can jot down interesting things you learn and see. There are so many different interlacing themes that by the end of the month, you’ll be so grateful for a written record of your experiences!

Highlights

- Meeting and discussing the implications of public health in the medical field with Dr. Joseph McCormick, MD, MS
- Going to Green Valley Farms to meet members of the local community and learn of their struggles first-hand
Health on the Texas-Mexico Border

Incorporating Cultural and Environmental Factors into Healthcare

By: Lauren Fanty

Participation in the STEER Program in Harlingen, Texas this summer helped me gain an understanding of how different aspects of living on the border make it an exciting and challenging place to practice public health. In order to more fully experience the South Texas culture and lifestyle, we traveled to a variety of work sites such as colonias, recycling centers and community centers. We discussed the challenges of providing health and implementing policy in an area where communication with another country is paramount to success.

Public Health Significance

Assuring a competent public health and personal health care workforce.

Steer sought to increase our critical thinking skills and knowledge base by having us consider how environmental conditions could be contributing to health concerns. We were challenged to explore a different culture and set of beliefs of the people in the area.

Our lecturers ranged from local doctors to concerned parents in the area, giving us an introduction to a variety of perspectives. Many days we also stepped out of the classroom and into the community—helping sort papers at a recycling plant, assisting an elderly woman in home repairs and helped out in other places where we were needed.

My final research project and presentation addressed the public health impact of tire piling on the border, an issue I had never viewed as important before participating in STEER. My experiences this summer have helped me become aware of the importance of blending environmental and cultural awareness with the clinical presentation of the illness while treating a patient. As a future physician and public health worker, I feel these qualities will greatly enhance my ability to providing competent care to the communities I serve.

Special Events

• Intimate conversations with people facing difficulties obtaining health care
• A glimpse into life in the colonias
• Personal meetings with the Director of Public Health of the City of Brownsville
• Exploration of zoonotic diseases seen on the border
• Lectures from border patrol
• Visits to waste management and recycling centers
• Hurricane preparedness conference

Advice for Future Students

• Be open minded and willing to explore the vibrant culture found on the border.
• You have the unique opportunity to hear the obstacles this community faces—listen!

Volunteering with Proyecto Azteca to help rebuild a house. Source: Dr. Noe Garza.

Visiting a state park that is often used as a crossing point into the United States. Source: Dr. Noe Garza.
Public Health on the Texas-Mexico Border

Practicum Highlights

• Visit the City Public Health Department
• Visit community health centers and meet with Promotoras
• Help build or repair a home in collaboration with a community organization
• Learn about Border Public Health from local public health leaders
• Visit a Curandero, and learn about the role of alternative medicine with respect to the culture
• Visit the Colonias

Advice for Future Practicum Students

• For future STEER students I would like to encourage you to approach every experience and interaction with community members with an open and eager mind. Learn as much as you can from them, because understanding the members in the community and learning about their culture will help you to understand how to best approach their public health issues.

Border Public Health: Culture and Environmental Impacts on Health

By: Rebbeka George

At STEER I had the opportunity to learn more about the public health issues along the Texas-Mexico Border. I was able to meet with several public health officials, and community health workers and leaders about what they are doing to mitigate many of the health issues. I was also privileged with the opportunity to visit a Colonia, and learn more about their struggles and achievements in receiving access to adequate public health infrastructure. I was immersed in the culture and learned a lot about the importance of understanding and connecting with the community members to make a significant impact.

Public Health Significance

The two essential public health services that the STEER program catered to were informing, educating and empowering the community, as well as mobilizing the community. This program partners up with many of the researchers to identify health problems in the area and works with community health workers, Promotoras, to help educate the community about how to fix these health issues. There is also great partnership with community organizations whose missions are to improve the public health infrastructure as evidenced by our volunteer work with Proyecto Azteca.

This practicum covered a very broad spectrum of public health topics that were specifically relevant to the Texas-Mexico border. My duties involved attending seminars and volunteering time to help the community. At the end of my experience I partnered with another STEER participant and created a presentation on Migrant Farmworker Health. This was a relevant topic as there is a large population of migrant farmworkers living in this region. We found that this population is very underserved, and is still lacking in adequate healthcare and despite this knowledge there is little research on this population regarding their health.

The STEER program makes an impact on public health in the community in the sense that we volunteered our time to help the community and also visited with members in the community to learn more about them and their needs.

Specifically, we helped sort through material for recycling at the Harlingen Recycle site and also assisted Proyecto Azteca with home repairs for a family in need.
Public Health on the Border

Discovering the many faces of public health
By: Rutger Gunther

A small group of students with diverse backgrounds in public health, such as social work and medicine, were able to work with the Regional Academic Health Center at Harlingen in order to learn more about health issues on the border.

Our educational experience lasted only a month but we were able to see many elements of public health that were previously unknown to us.

Examples include the border wall, community health centers, the port of Brownsville, recycling centers, the landfill, the zoo, and many others.

While no specific project was completed, the focus of the program was to educate students in a broad spectrum of public health domains. We came away from STEER with a much better understanding of health on the border and public health as a whole.

Unique Experiences

• We were able to visit a curandera and experience first-hand some of her alternative medicine healing techniques.

• Going to a detention center and seeing the resources required to support such a system was truly eye-opening.

“Pearl of Wisdom”

Be sure to bring a notebook with you so you can jot down small notes on your daily adventures. That way you can review it later and remember how each experience affected you.

Public Health Significance

When relating STEER to the 10 essential public health services, it successfully incorporated each and every one of them. I think it was incredibly successful in its goal to educate young students on many public health issues on the border.

The Regional Academic Health Center (RAHC) is a sister organization to the main UT Health Science Center of San Antonio. Its enormous academic value in the Rio Grande Valley makes it a hub for research and education.

In the coming years, it will become its own independent school of medicine further establishing its role in providing better health services to the valley.

The Rio Grande Valley is one of the most medically underserved areas in Texas and in the United States. The RAHC plays an enormous role in trying to revitalize the community with both research and education of future doctors. I look forward to seeing the future work that will come out of this rapidly growing institution.

Student practicing CPR on patient in brand new state-of-the-art simulation hospital at the RAHC.

Photo taken by Dr. Noe Garza
Health, Hope and Hot Days: Lessons from the Field

By: Alison Kimura

A team of 8 students, including medical students, MPH students and a social work student, spent one month in the Rio Grande Valley (RGV) studying the environmental aspects of public health in this region of Texas.

We were introduced to a wide range of public health programs and policies unique to this area, gaining an appreciation for the challenges that the RGV community faces. We engaged with physicians, public health officials, community health workers, and members of the RGV community to gain a holistic view of what life in the Rio Grande Valley truly means.

At the end of the month, we prepared a presentation regarding a significant public health issue in the RGV. These presentations ranged from migrant farm worker inequities to Dengue fever.

Public Health Significance

The STEER program aims to expose students to as many aspects of border health as possible. Throughout our time, we learned the importance of collaboration in both diagnosing, investigating, and treating a public health problem. We also learned, through meeting with program directors, how important policy and law can be in their approach to public health mobilization. Through meetings with border patrol and advocates of immigrant health, we witnessed firsthand how health and immigration are intimately intertwined. We were reminded how important the enforcement of laws and regulations can be in protecting the health of a community; and how hard the balance between protection and compassion can often be. Among many other lessons, one of the most profound was about health disparities and the consequences that arise from inequities and injustice in health care. We were empowered to be change agents for better health.

Special events/ duties during your practicum

- Visit a detention center and learn about an individual’s experience there before deportation
- Meet parents raising children with Autism Spectrum Disorder and learn about their challenges

Lessons Learned

[OR] Advice for Future Students

- Be open and receptive to everything you are exposed to. Relish this opportunity because it is a great preparation tool for our future careers.
Discovering the link between environment and public health

By: Sierra L. Mitchell

For four weeks, a group of peers and I participated in STEER Harlingen, which focuses on exposing the environment of the border and its effect on public health. There were two main aspects of the environment that seemed to have the most impact: the cultural and physical environments.

To understand how the culture impacts the many aspects of public health, we visited a local curandera and experts of the Latino culture to learn the many influences that impact their health. Additionally, we explored the physical environment by visiting and learning on how its pollution has enforced prohibition of fishing which supplies food for low-income families. We also visited colonias and saw firsthand the unhealthy living conditions that many families experience.

Lastly, we explored the ecological consequences of the border wall and how it has interfered with the migration of local wildlife. One of the most shocking discoveries was the reports of multi-drug-resistant tuberculosis and outbreaks of dengue on the border. With limited access to care and resources, there are obvious challenges that need to be overcome.

Public Health Significance

The significant prevalence of various morbidities on the border has fired up the community in addressing the health needs of the community. Throughout the STEER experience, it was apparent which of the Essential Public Health Services were being addressed and how they were going to address them. Firstly, the School of Public Health has been instrumental in the diagnosing and investigating of the health problems of the community. For example, there was a large survey done in the city of Brownsville in which data analysis was performed to help create programs to increase public health education. A large portion of these programs have seen success because of promotoras, local community health volunteers, who educate their community and in turn empower. We had the opportunity to do a house visit with a promotora and see firsthand the acceptance they receive in the homes.

We witnessed neighborhoods band together such as Proyecto Juan Diego which started as a dilapidated colonia and has transformed to a proactive community that advocates for their rights, education, and health. Working through these communities allows for a larger support base when it comes to sparking changes in health behaviors.

One of the most exciting developments as a MD/MPH student was the learning of the opening of the new medical school of the Rio Grande Valley. This will not only attract more healthcare professionals to the area, but also increase the availability and accessibility of healthcare services for the community. There is also an impressive clinical research facility that holds biological samples which will serve to attract medical researchers who can work to answer questions that the particular community has such as why is diabetes so prevalent in the Hispanic community and what impact does the environment have in the cognitive and emotional development of the community. Knowing these answers will shape the future of public health.

While their efforts are tremendous and commendable, there is still so much that needs to be done. However, I am encouraged by the sense of community and inspired by those who have dedicated their lives in serving a much forgotten population and environment.

STEER Highlights

- Visiting a local curandera and learning how she uses natural remedies to cure ailments of members of her community.
- Touring the colonias and hearing the compelling story of Ms. Castro and her family. (Refer to top photo)
- Learning of the impact of city-wide initiatives in Brownsville designed according to research done by the local School of Public Health.

A Pearl for Future Students

During your time in Harlingen, take advantage of volunteering with local organizations of interest. It adds so much value to the experience to be able to give your time and efforts for the betterment of the border community.
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/