

2018 Costa Rica



A Comparative Analysis of Emerging Infectious Disease Outbreak Preparedness and Response in Costa Rica and the U.S.

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Project Summary

The goal of this trip was to compare governmental and health care system responses to emerging infectious disease to discern best practices from a global perspective. The objectives of this project were as follows:

- To understand how the United States and Costa Rica governments responded to the 2016 Zika outbreak from a clinical, pharmaceutical, health care system, and community perspective.
- To help the student understand the similarities and differences between the two approaches and the disadvantages and advantages of both approaches.
- To help students conceptualize how successful practices developed overseas might work in the U.S. and barriers to importing such practices.
- To understand the role of communities in infectious disease outbreaks and how to engage the community in mitigation of such outbreaks.

- To share work on a collaborative white paper and share the results with public health officials in both countries.

During their time in Costa Rica, students were given a truly interprofessional view of Costa Rica's Zika response. Students met with officials from a variety of agencies involved in Costa Rica's response to the Zika virus, including an official from the National Commission for Emergencies, CCSS (Caja Costarricense de Seguro Social, which administers Costa Rica's health care), and INCIENSE (the National Laboratory). During this time, they learned not only about Costa Rica's health care system generally, but also about the mechanisms emergency management and health officials used to respond to Zika — from declaring a state of emergency to testing protocols for suspected Zika cases.

Additionally, students met with health officials from the Ministry of Health regional office in Limon (the region most directly impacted by Zika), where they talked to nurses and entomologists about local response measures, including public outreach and education, vector control measures, and testing protocols. Students were able to go out into the field and experience firsthand some of the area's vector control measures.

Students also met with the dean of the University of Costa Rica School of Law, where they learned about Costa Rica's legal system and its role in the Zika response. Students toured the National Children's Hospital and met with the head medical team in charge of monitoring and supporting pregnant women and infants with or suspected of having, Zika syndrome, and discussed the role of medical providers and social services in Zika response. They also were able to tour the premier medical school of Costa Rica.

As part of the 360-degree view of response, students also met with the lead health reporter at *La Nacion* (a large, respected newspaper in Costa Rica) to find out the role media played in the Zika response. Communication across all sectors was a key theme of the trip; student met with officials from the Ministry of Public Education to learn about the education and outreach campaign they crafted for children in schools; students also met with CCSS' health communication and advertisement team to learn about its public messaging and education strategy for Zika. Students were able to apply their knowledge at the end of the trip by participating in a tabletop exercise/scenario in which they had to make decisions based on a fictional health emergency.

Reflections

"Our trip to Costa Rica was eye-opening for everyone involved. Over our time there, we watched as students made connections not just to the country and those we met there, but also to one another. The conversations students had about their respective schools and fields of study — and how those fields could work together — were exciting to listen to and to participate in. As faculty members, we were attorneys, but we brought medical, pharmacy, nursing, and public health students on the trip. It

was amazing to see what everyone brought to the table and the insights that came out of such a diverse group!" — Trudy Henson

"I learned so much, not only about Costa Rica and its health care system but also about its government and legal structure, and the many systems in place to allow for a powerful Zika response, what the response itself was, and more. I also was able to expand on my knowledge about the United States and recognize similarities/differences that would allow or complicate our ability to mimic Costa Rica's response. Moreover, I reflected on similarities and differences that exist culturally between the two countries. Lastly, I learned a great deal about both mosquitoes and Zika virus itself. I am extremely grateful for the opportunity to gain new perspective by working closely with students and faculty from different UMB schools. Through this global experience, I was able to bring concepts that I've learned in the classroom to life." — Elena Buff