



Long Island University Pharmacy Class of 2016:

# Janice Chheda

**Porfibert Crisantos** 

## Gazi Shahnaser



"The best way to find yourself is to lose yourself in the service of others." - Mahatma Gandhi



"To teach is to touch a life forever." -Unknown



"We rise by lifting others."

-Robert Ingersoll

		Shoulder to Shoulder is a private, non-profit, non-governmental organization committed to helping the people of Intibucâ, Honduras since 1990. Our medical brigade worked together with local members of Hombro a Hombro for 10 days. www.shouldertoshoulder.org
May 26	Departure from JKF Arrived at Tegucigalpa Travel to La Ciudad de La Esperanza	
May 27	Departure from La Ciudad de La Esperanza Arrived at Colomoncagua	
May 28	Clinic Day 1: Santo Domingo	· · · · · · · · · · · · · · · · · · ·
May 29	Clinic Day 2: San Miguelito	the fit the state of the state
May 30	Clinic Day 3: San Marcos	
May 31	BREAK DAY! Waterfall of Colomoncagua	and and a second and a second
June 1	Clinic Day 4: Health Center of Colomoncagua	
June 2	Clinic Day 5: Health Center of Colomoncagua	
June 3	Travel to Hotel Siguatepeque	
June 4	Departure from Tegucigalpa Returned Home	

### **Strangers Meeting Strangers in a Foreign Land**

As foreigners, we entered Honduras hauling 12 luggages packed with medications and medical supplies, ready to distribute to our patients in need. At 11:00 am we arrived at Tegucigalpa, the capital city of Honduras. At the airport, we anxiously waited for the rest of our brigade to arrive. We were strangers meeting strangers in a foreign country ready to come together for the next 10 days. Santos, our driver, was happily waiting with a bus to take us to our next destination, Colomoncagua, a municipality in Intibucá, Honduras. We already felt welcomed into Honduras as we continued outside of Tegucigalpa. As we rejoice and begin our journey on the rocky dirt roads, we are fascinated by the beautiful setting of Honduras. Each mountain we passed echoed volumes of comfort and acceptance. The landscapes were simply breathtaking. Making the transition from the urban city of Tegucigalpa to the rural town of Colomoncagua, we drove past broken down homes shadowed by tall trees. Many of these homes captured our attention with their deteriorating exterior structures, often lacking adequate sanitation. After 2 days of travel we arrived at "Hotelito Bryan", our new brigade home. There were 2 communal cold water showers and 2 toilets (that luckily flushed) shared with 5 other people. We quickly learned to never travel without toilet paper. Two pickup trucks transported us through the mountains and local towns, giving us an inside view of the rural living conditions. Tiny towns were scattered throughout the mountains, with at least a 20 minute drive separating one town from the next. During our drives we came across locals walking on the dirt roads, wearing looks of heat and exhaustion and tiny worn out sandals under dirty, tired feet. Other locals were selling various items, mostly food. Many children sold "churros" (fried chips), in order to make their daily money. Other locals sold fruits and corn. We encountered a man selling pineapples for 15 lempiras, (\$0.68 USD).



## **A** Complicated Jigsaw

Upon arrival in Honduras, we were thrilled to meet the new members of our team who we would share the next 10 days with. Each member of the brigade represented a building block for the overall success of our interdisciplinary team. Although we initially started as individual pieces of the jigsaw puzzle, our collaboration together helped to solidify a connection of a lifetime.

Pharmacy	1 Faculty/ pharmacist	Long Island University Pharmacy
	3 Final year pharmacy students	Program, Brooklyn, NY
Medical	2 Attending physicians	Maine Dartmouth Family Medicine
	3 Final year residents	Residency Program, Portland, ME
Nursing	2 Third year nursing students	Bethel College, Mishawaka, IN
		Lewis Clark State College, Lewiston, ID
Mental Health	1 therapist	Stanford University, Stanford, CA
	1 Spanish-speaking daughter turned	
	pharmacy translator	

#### **Pharmacy Practice in Honduras**

While exploring La Esperanza, we came across an independent community pharmacy called Farmacia Corazon de Jesus. We learned from the Pharmacist that pharmacy school was 5 years. Many medications in Honduras are generally cheaper than in the States. For example 1 tablet of Viagra costs about 45 lempiras (~3 USD) in Honduras, while the same tablet costs 45 USD (~1,000 lempiras) in the US. However, some important medications like Insulin are not easily accessible and extremely expensive. It costs about 800 lempiras (36 USD) for one vial. This is an expense that not everyone can afford. Some regulations are similar to the US like keeping documentation on dispensed control medications and only filling 30 day supplies at a time.



It was very evident to us that the way the pharmacy and clinical practice worked much differently than back home. In the rural health clinics, doctors may come in once a month with nurses present a couple of times a week. Most clinics have an area where medications are stored but no licensed pharmacist to dispense. The patient counseling and refills of medications are done by the nurses. There is a consultation fee of 5 lempiras (\$0.23 USD) per visit. This includes medications (usually a month supply) from the pharmacy. Even though this doesn't sound like a lot of money, some patients are not able to afford this. Recently, there was a manufacturer back order and some health clinics were not able to get any antidiabetic or antihypertensive medications for four months. Many patients had to travel to El Salvador for refills but most went without medications.

There are public and private hospitals also in Honduras. However, it would take ~3 hours to get to the nearest hospital from our location in Colomoncagua. Due to the distance and cost, most Hondurans living in rural areas rely on clinics.

#### **Fish out of Water**

Clinic days started bright and early. As we approached the clinic, the lines of people waiting to be seen were instantly visible. We arrived every morning at 8:00am very excited to begin seeing patients. Crowds of people patiently waited for us, welcomed us with greetings, smiles, and endless waves. Patients came from all over. Some were residents of the clinic community, while others traveled very long distances from neighboring towns just to be seen by our team.

First, patients were registered by the health promoters and given a number. Next, vitals such as blood pressure, height, weight, and temperature were recorded by the nursing team and local staff. Then patients wait in line to be seen by one of our team physicians. The medical team performed full physical exams. Gynecological tests and pap smears were offered to women and given as per request. On-the-spot diagnoses were made by sample inspection with the microscope and other lab equipment brought by the medical team. Lastly, patients were directed to the pharmacy to pick up any prescribed medications.

A patient form was completed for each patient, which included demographics, vitals, chief complaints, history of present illness, diagnosis and treatment plan. We decided it was important for us, the pharmacy team, to provide our patients with unique care



and attention they would always remember. We did not simply "fill their prescriptions." We critically reviewed each patient form, and verified any discrepancy we felt existed and provided our own knowledgeable input and recommendations to both the physicians and the patients. We verified medication doses or often times calculated them ourselves. We were responsible for selecting the medications most beneficial and appropriate for the patient as per their individualized diagnosis.

We aimed to optimize their medical experience with us and provided personalized counseling sessions. Every patient that came to pharmacy was counseled on the proper use of their medications and not a single patient was rushed out or left with a question in mind. All of our patients left with an educational pamphlet highlighting



important issues such as alcohol abuse, GERD, and appropriate medication use.

How did we set up the pharmacy? For clinic days 2 - 5, the facilities we visited had established pharmacy areas where we could set up with our supplies. Being in the clinic pharmacy allowed us to readily know which medications the clinics had available in stock. The first day however, we were not so lucky. We converted a grade school classroom into a pharmacy by combining several little children desks to create a counseling station, a fill station and an area to hold our medications. Each day we unpacked our suitcases filled with medications divided into plastic garbage bags according to drug class. This made it easy for us to know where everything was and the general quantities available throughout each work day.

### Leaping through Hurdles

We experienced several unexpected challenges. We found ourselves taking extra time to truly educate patients on proper directions, especially for syrups. We needed to make sure that our patients understood how to "cucharadita" measure (teaspoonful) a properly. We brought oral syringes and measuring cups and marked doses for patients. We found ourselves using a lot of hand gestures to help emphasize the importance and number of times per day they needed to take their medication. For tablets, directions such as; take 2 tablets, 2 times a day, became extremely challenging for us to explain.

On several occasions we were asked to identify foreign medications we had never heard of. With no internet access whatsoever, this too became a challenge. A patient brought in a product label explaining it was their blood pressure medication. When reviewing the label we found that the medication was a combination herbal extract. Another foreign drug question arose about an unknown antibiotic. Luckily, we were able to utilize the LexiComp application from our phones, which did not require internet access to work. We discovered it was a cephalosporin which helped the physician develop a management plan for the patient. Although in the US books have become obsolete, in this setting the reference books were invaluable. With such limited supplies, we were also faced with the challenge of having to decide which patients should receive certain medications (such as albuterol inhalers). We also had to make sure our patients were able to open bottles properly (i.e. childproof tops), since they may not be used to such devices, otherwise the medication would be of no benefit to them.









Pineapple Man













#### **One Bite at a Time – by Janice Chheda**

A large part of an effective mission trip is being able to embrace the culture and community as is. I never truly anticipated how difficult it would be to make a connection with a person who I cannot verbally speak to. Overcoming this barrier meant venturing outside my comfort zone. Communication was now based on facial expressions and body language. Translators were gifts for me because at least I had some hope that the information I wanted to express was correctly understood by my patients.

Traveling to a foreign land always poses some apprehension for me because of my dietary restrictions. I am a strict vegetarian. My main concern before embarking on



this journey was, will there be any food for me to eat? I also didn't want to be considered rude or disrespectful for not eating the food placed in front of me. However, these concerns were eased once we got to Honduras. We had a wonderful cook Maria who prepared a majority of our meals. However, I was grateful to discover that most Honduran meals included at least some refried beans, tortillas, rice, and plenty of hot sauce on the side.

Overall, the challenges that I experienced were minor. Both barriers were able to be overcome and allowed me to have an amazing experience while abroad.



#### **Opening Doors** – by Porfibert Crisantos

For me personally, language was not a barrier, instead it opened many doors and allowed me to establish a strong relationship with the patients. I felt very fortunate to be fluent in Spanish for this trip. I spent the majority of my time with patient counseling and assisting with translations for the whole team when needed. I was able to establish a connection with the patients and it was an amazing experience. Often times they became comfortable enough with me and readily gave me more information and details than they provided the physicians during their consult. I was able to engage them in deeper conversations and ask them further questions that were critical to help us optimize their treatment.

One of the biggest challenges I faced was counseling patients on the proper use of an albuterol inhaler. My fear was them leaving without understanding. I decided rather than just tell them how to use it I would make them practice in front of me and inhale a dose on the spot. Both the younger and older patients had trouble with the coordination of the breaths

and firing of the inhaler. Even the concept of them closing their mouths on the inhaler and breathing at the same time was very difficult for them to understand. Luckily most of them were eager to learn and practiced with me until they felt comfortable. I was very happy to assist them for I knew it was a technique that could potentially save them from an asthma attack. I will never forget the way their faces filled with excitement and pride when they were finally able to inhale a puff correctly. These tutorial sessions required much patience from both me and the patient. After many tries and much repetition of instructions, both the patient and I were able to grow more comfortable with the process. Although I was the one teaching, my patients helped me learn as well. It made me realize, as a future pharmacist, the influence you have on a patient will be forever lasting. This made me truly appreciate the power and responsibility associated with the profession.

#### "Charlas"

Nelson Mandela once said, "Education is the most powerful weapon which you can use to change the world". Medical brigades do amazing things for the countries they visit, but a majority of these mission trips are short. However, it is necessary to focus on the long term aspect of care as well. In order to provide that care when the medical mission team leaves, it is important to help educate the health care workers that will be providing the care once the brigades leave.

During this mission trip there were several "charlas" or educational talks. Our brigade led charlas about drug and alcohol abuse, domestic violence, teenage pregnancy, and chronic diseases like hypertension and diabetes. These topics were selected prior to our arrival to Honduras based on community preferences. However, teenage pregnancy and contraception was a topic that was not accepted by all. A high school in San Miguelito, to our surprise, let their students out at 11AM in order to avoid a sex education talk held by our nurse.

Our own charlas on diabetes and hypertension also did not go as planned. The presentation was intended for the nurses and health promoters, focusing on the medications that treat the diseases. The charla was held in a local community center which had a tin roof and windows without glass. Suddenly it started to rain. It seemed like bricks were falling from the sky and smashing onto the roof. It was so loud that we could not hear the person sitting next to us. We waited for about an hour and the rain still did not let up. Thankfully, we made handouts of our PowerPoint presentation in Spanish, and the staff were able to read the information. They told us that there was some information in our presentation that they didn't know about and thanked us. A couple of the nurses approached us and we had a huddled informal talk with them. We learned from them that the clinics themselves ran on a limited budget, which highly influenced their way of practice. Certain lab tests were not within the clinic budget. Hemoglobin A1c's were too expensive, leading to a less reliable method of diagnosing diabetes by fasting blood glucose levels from a glucometer. Although we came to teach, we ended up learning more about the challenges they have practicing. This knowledge allows us to think about better ways to help in the future.





#### **Importance of Education – by Gazi Shahnaser**

After long days, we encountered sporadic power outages. Without electricity and technology to capture my attention, the words "opportunity" and "privilege" scream at me as I start to think about life. Growing up, I remained focused and strived to do well in school. During times of hardship, I think about the potential outcome of graduating as a pharmacist and think to myself that everything will eventually pay off. Often times I overlook the fact that I was given this golden opportunity to get an education. The reality is that many people do not have the option to pursue an education.

Education serves as a powerful tool for expanding opportunities to escape out of poverty, and generating jobs for the youth. Echoing this, the movie we watched, "Living on One Dollar," mentions how many kids do not have the liberty to choose between working to help provide for their family and going to school.



Working is a sacrifice they have to make. Although these kids may have life goals they dream about, it is often unrealistic for them to pursue. Many kids living in a developing country have their goals shattered by financial constraints. They are often the ones as the movie mentions, "fighting just to survive." Having this quote engraved into my mind makes me cherish the opportunity and privilege I've had growing up. How can we help? Microfinancing programs and other international aid programs geared towards education and improving development are critical to changing the reality for these children. I hope that more people will come together to join the efforts to shift "surviving" to "thriving."

#### Act of Kindness

"Kindness is the key to our collective experience. Acts of kindness demonstrate that we are vulnerable and dependent on each other. Every experience, every encounter, no matter how slight has meaning and hidden significance." This quote from our Mental Health Team member, Michelle Nguyen, depicts the enchanting culture and respect that we have had the privilege to be a part of in Honduras. It is truly remarkable to see how those who have so little to offer are often ones who are willing to give the most. The people of Honduras proved to us that generosity and kindness could be demonstrated no matter one's financial or living status. We were treated with great hospitality, fed three meals a day, safely transported to our designated locations, and integrated into the culture of Honduras. Although we came into Honduras as a foreigner on day 1, we leave as sources of inspiration, role models to younger generations, and friends to the people of Honduras, by day 10.





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# Alumni Corner:



Erica Faith Weinstein, PharmD. AMSCOP '13 Alum

In Spring 2012 I became part of the iLEAP family and traveled to Sierra Leone with many great people for an unforgettable experience. I was both challenged and changed by the people I met and the places I had visited along the way. As a health care professional in the United States, I am guided by the standards of care and expectations of medical practice that should be provided to each patient.

In Sierra Leone I was exposed to the many different challenges other nations face that prevent such provisions of care from taking place.

The systematic hardships that stem from social, economic, spiritual and historical origins over there have brought me to become so grateful for the things I have at home.

Being humbled as a person goes hand in hand with being humbled as a practitioner. Rather than becoming frustrated with patients who seem ambivalent to their health care needs or lacking in patience with the health care system we have, I have learned to take a step back and think of how they need to be informed with 'big picture' ideas and simply educated on the resources they have at their fingertips to guide them to a better way of living.

Travelling back home from western Africa allowed me to provide education to my peers on what life is like for the small villages as well as the larger cities in the region. I opened up to my realization of misconceptions I had before visiting, and the misconceptions I held while I was still there. Toward the end of the trip, I left several of my misconceptions in Sierra Leone and took home a lifetime of lessons.

I am honored to share my experiences with current and future health care professionals. I am forever changed in the way I interact with people, be them patients at the pharmacy counter or strangers in the grocery store. If I have one piece of advice for anyone who is looking to find their path in school, work or life in general I would say this: *Take yourself out of your comfort zone*. *Challenge yourself, change, and grow. Above all, TRAVEL!!!* 



We would like to extend our greatest appreciation to our dedicated professors, Suzanna Gim and Fernando Gonzalez. Without their support, this trip would not have been possible. They have impacted our lives tremendously and we will be forever grateful for these life changing mentors. They have influenced us in such a way that no classroom setting could have offered. We wish the best of luck to future trips and encourage all students to pursue this opportunity.

-Team Honduras 2015