

Honduras Trip Report – October 2015
Department of Family Medicine, University of Rochester

Participants	
<u>Faculty</u> Kevin Kless Douglas Stockman Carol Thiel	<u>Medical Students</u> Chanh Huynh
<u>Residents</u> Mary Bonnet Ryan Cummings Liz Meehan	<u>Unitarian Church</u> None
	<u>Dentists</u> None
	<u>Interpreters</u> Alex, Lester, Melisa, Becca, Xio

Introduction

The Department of Family Medicine at the University of Rochester operates a Global Health Program. This year-round program offers didactic training throughout the year and travels twice a year for two weeks at a time to rural Honduras. The Department has partnered with an NGO called Shoulder to Shoulder and a rural community called San Jose San Marcos de la Sierra in the Southwestern state of Intibuca, Honduras. The needs of the target community are great and go beyond curative medicine. By listening to the concerns of the local community members and performing qualitative community assessment, we are creating interventions designed to address the common problems. Below is a report from our October 2015 trip.

Travel and General Comments

There were no problems with travel. Due to the need for residents to come back at a specific time to take a national test, we arrived in San Jose at a time in the week which limited our time in clinic. Even with the reduced number of clinic sessions we were busy. About half of the group were sick with diarrhea and/or upper respiratory infections. We again enjoyed the excellent Honduran cooking of Maria, so food was eaten in abundance and trip members loved not having to do dishes for 2 weeks! The rainy season was still active so we had significant rain on all but one day of the trip. This trip, members worked very hard and people really pulled together to function as a group. The people also dealt well with the primitive conditions and always had a positive can-do attitude.

Meetings

Much of our time in San Jose is spent in meetings. We work very hard to ensure excellent communication with San Jose residents. We want to understand the important issues for the San Jose people and work closely with them. Our first Saturday in San Jose was spent meeting with representatives from the villages. This two hour meeting helps define what projects will be pursued during our two weeks in Honduras. Then throughout the two weeks other smaller meetings that address specific projects occur. It is not uncommon to have 2-3 meetings a day on various topics. We learned more about how projects were going and tweaks to improve interventions.

Year-long Volunteer

Joshua Back, a UR medical student, took a year out between 3rd and 4th year. He completed his San Jose stay in August. He worked very hard during his year in San Jose. He furthered all our projects and

really became a valued member of the community. His project for medical school credit involved surveying 60 homes spread out over many square miles of rugged mountains. When one considers Josh would often hike for 2-3 hours to a distant home to find no one in, necessitating a repeat hike at another time, one appreciates the magnitude of his effort and accomplishments. Consider going to www.sanjosepartners.org to see a map of the locations he visited and a summary of his work.

Education & Schools

Student Education

Health is adversely affected by poverty, and lack of education contributes to poverty. Education was one of the San Jose community's top priorities in past meetings. Local elementary schooling often ends after the 6th grade, as most families cannot manage the extra expenses of sending their children to the nearest junior-senior high school in San Marcos, up to a 3-hour mountainous walk away. For a number of years now, the First Unitarian Church of Rochester has provided scholarships enabling the most needy and promising applicants to meet these expenses, which might include housing in San Marcos.

Antonia is a “poster child” of this program. She finished high school and now teaches kindergarten in Portillion and tutors scholarship students in San Jose on Saturday mornings. Interpreter Lester and I attended a tutoring session, and Lester was able to assist students with English, which along with mathematics is one of the most challenging subjects for local students.



Carol helps a young boy with tangrams

On a hot day, 9 brigade members walked 90 minutes down the mountain to the elementary school in Portillion, where many children excitedly watched the arrival of the “gringos.” Interpreter Alex and I distributed tangram pictures made by the Unitarian children to the Honduran 4th and 5th graders, who reciprocated by arranging and tracing tangram figures which they autographed and gave to me to share with the Rochester children.

Often the brigades assist teachers with curriculum development, but due to this brigade's small size, we were unable to do this. As usual, current scholarship students reapplied to continue in the program and their grades were collected from the San Marcos high school, where the principal commented that “our” students rarely miss class. Due to torrential rains early in the trip contributing to poor meeting attendance, the gathering of new scholarship applicants necessitated a second meeting. Meanwhile, the Portillion principal and teachers, who added 7th and 8th grades to their remote school this year requested funding for school supplies for a planned 9th grade. Although their reasoning that they would be able to educate a larger number of students instead of sending just a few students to San Marcos is sound, this would provide a financial challenge to the Unitarian Church.

Carol Thiel

Sex education

Although our group was small, many members expressed interest in visiting schools to do some health teaching with the students. Near the end of the trip, we shut down the clinic so we could make the 2 hour trek (both ways) to Portillion to spend some time teaching the 7th and 8th grade students. The principal requested that we discuss puberty and sexuality. She gave a great introduction, sharing her personal story of pregnancy at a young age and its impact on her life. After a slow start, many students became

actively engaged during the session. We distributed slips of paper to each student so everyone had an opportunity to ask anonymous questions. We discussed puberty in boys and girls, the importance of consensual sex, pregnancy prevention and planning, as well as STI's and their prevention. Our interpreters, Lester and Melissa, did a fantastic job helping us discuss these sensitive topics and fielding questions. The students asked a variety of questions including "why does it hurt when you have your period?" and "what is love?". At the end of the discussion, one of the students graciously thanked us for taking the time to come and speak with them.

Liz Meehan



Sex education classes in Portillon

Microfinance

The micro-finance program began in May 2008 as a joint partnership between the Highland Family Medicine Global Health Program and the First Unitarian Church of Rochester. The program aims to improve the economic well being of Hondurans in San Jose by making small loans available at low interest rates to local entrepreneurs. Seven and a half years later, the program continues to be a strong presence in the community with evidence that it is becoming more sustainable.

The loans in many prior brigades came from a combination of money repaid by the community and new donations from people in the U.S. to the microfinance program. This year, all of our loans came out of the money collected, rather than donor funds. Of the twenty three loan recipients last brigade, twelve paid in full and on time. Of the remaining eleven loan recipients from May 2014, eight paid the 2% interest and explained circumstances surrounding delay in repayment (including personal emergencies and unexpected business obstacles), and three did not make any payment (one came to explain his reason for delay in payment while the other two did not). One person repaid a loan taken out in October 2014, and three others made partial repayments from loans taken out on prior brigades. In all, we loaned out 27,750 Lempiras in May 2015 and collected 21,215 Lempiras in October 2015.

This year, 31 people received educational courses through a business curriculum from Freedom From Hunger with 23 successful loan applicants (7 of which were first-time loan recipients). We received great feedback for our skits and presentation. The community was highly engaged with many members sharing their experiences and ideas. Multiple community members emphasized the importance of repaying loans in a timely manner and asked that we share the names of those who have not repaid for more than 3 brigades. This is one way for us to encourage repayment. In addition, only those who have repaid are eligible for new loans and participation in projects such as water filters, latrines, cook-stoves, and scholarships for students, while the medical clinic is available to all. The day took an unexpected turn when one of the applicants, who has a history of epilepsy, had a break through seizure during her loan interview. Fortunately, the team responded quickly, and the episode resolved in minutes without complications. Despite a small team of five brigaders and four interpreters, everyone worked diligently, and the day ended on a successful note around 5 pm.



Mary and Lester perform a loan repayment interview



Micro-finance audience getting into the class



Chanh, Mary, and interpreters teaching a micro-finance class

Loans were awarded to people who have businesses that range from more common occupations such as selling tamales and fruits to more unique ventures such as selling livestock (pigs and chickens), embroidering, and operating a plant nursery. Many returned loan applicants emphasized that the loans have allowed them to sustain and grow their businesses, support their families, and create employment in the community. The continued success of their businesses allows people in San Jose to have continued access to credit at low interest rates. Despite the challenges, in tangible ways, the microfinance program is helping the people of San Jose, Honduras.

Chanh Huynh

Medical care

The clinic was steady busy this trip. Interestingly, the clinic is now open two days a week, when we are not in San Jose, with a simply trained community health worker (CHW) provided by the Shoulder to Shoulder program. It is great the community now has some access to health care when we are not in San Jose. The CHW is from the community and knows much of the social issues of the population which really helps as we provide care to community members.

Some notable cases

In May 2015, Jean Hamlin (graduated June 2015) helped diagnose complete heart block in a man from San Jose. His pulse runs around 35, while a normal pulse is in the 60-100 range. Jean spent many hours and much of her own money trying to get this man a pacemaker. Her efforts were thwarted, but she thought she had a plan in place so that when a brigade of cardiologists came to Honduras in September, he would get a pacemaker. Although the history is not entirely clear, it appears the man did not get a pacemaker placed because he could not afford the actual pacemaker. His pulse continues to run in the low to mid thirties and he has great difficulty walking the mountains of San Jose. Surprisingly, the man remains in good spirits and thanks our group for helping to “save his life”.

A girl of about 8 was brought to the clinic one evening with a laceration to her knee. It was reported that she fell on a rock, but the laceration suggested a machete injury and the injury was quite extensive. Upon examination, it was feared her



Liz and Kevin clean out an open wound in a small child's foot

patellar tendon was cut. The decision was made to transport her to the Esperanza hospital about 90 minutes drive away. Ambulances do not exist in the area, and only a handful of people in the region have a vehicle. After multiple calls to truck owners, we found a person who would transport the girl to the hospital for \$50. The group of us collected money to pay for the transport. If we were not here, the girl would either wait until the next day and be carried to the main road to catch a local bus, or her family would have had to borrow the \$50 from a money lender, at a rate of 10% interest per month to pay for the truck. Borrowing money like this often results in a family losing their land to the money lender, and worsens the already existing poverty of the family. By the time we left San Jose to return to the US, we had not heard back about the fate of the girl.

A 7-year-old girl came in with her grandfather for a worsening, itchy rash over most of one side of her face and ear. She was diagnosed with atypical scabies, possibly super-infected with bacteria. Scabies medication, an antibiotic and instructions to boil the household's clothing and linen were given.

Home visits

We had a couple interesting home visits. Their stories are below.

Foot injury

During a clinic visit a woman mentioned that her sister in law was home-bound with a very bad sore on her foot and could not walk. She asked us to visit her, stating her home was just past the mango tree not too far down the road. The next day we packed up supplies, expecting a range of wounds from abscess to cellulitis, and knowing we could be in for a very long hike, "just past the mango tree." With exceptional ease we found our informant who led us to her sister-in-law's home. The smell of sweet breads filled the air, many many family members were sitting around, waiting for us it seemed. We introduced ourselves and asked to see the woman with the sore foot. She limped forward and revealed to us an open wound on her left foot. She stated a tree had fallen on her foot a few weeks ago and she was using cloth to cover it, but it continued to be painful. Upon examination, her foot looked surprisingly well, about 3 cm open wound on the dorsal aspect of her foot, minimal erythema, warmth and edema. We checked for pulses, range of motion, and were pleased that her wound appeared to be a moderate cellulitis. There was no need to drain, simple oral antibiotics and clean dressing changes would heal her. We discussed our findings with the patient and family, giving her a 10 day supply of oral clindamycin and proper wound dressings. When the patient heard we were not going to give an injection, she looked at us surprised and asked if she could get one. We looked around at one another, knowing this patient did not need an injection, but decided it would be best to go ahead and give her ceftriaxone IM as that is what the patient thought she needed to heal. After the injection, as we were packing up, the patient's sister stepped forward, with tears in her eyes, thanking us and offering warm sweet breads. She explained her 18 year old son just passed away from a heart condition, and the whole family was at the house mourning the loss. We were suddenly all taken aback. A family mourning a devastating loss and so overly thankful for our help. We all expressed our sympathy and our personal thanks for letting us have this experience. We finally headed back home, bellies full of sweet breads, reflecting on the incredible resilience of the people we just met.

Mary Bonnet

Chest rash

Word got around clinic that Don Jose's brother was on his way to visit but was stopped just one mile short of the clinic. He was ill and Manuel's family was housing him. Manuel expressed to us the gentleman had a large painful rash on his chest that was from the pee of a caterpillar. This visit we were

more unsure of what to expect, but prepared to treat and dress skin wounds. The next morning we set off early, taking a small hike to Manuel's house. When we arrived, we were ushered down stairs where Don Jose's brother was sitting, conversing joyfully. We were immediately relieved as we expected the worst when we heard sick, elderly man. He removed his shirt and revealed a large area of blisters, some scabbing over, over his right chest only, not crossing midline. Many of us did not know to think when we were told "rash secondary to caterpillar urine," but to many of us the rash looked like shingles. He described the rash as very painful, burning, itchy. He stated it all began last week with a burning sensation on his chest after he saw a black caterpillar with red antennas crawling on the wall. After examining the patient and obtaining the history, we concluded the rash was more likely from shingles than a contact dermatitis. We explained our findings to the sweet elderly man and explained that the rash would heal in time. He asked for something for the burning and itching. We were sad to discover that we brought unlimited dressing supplies but nothing to treat his symptoms. Manuel's nieces offered to walk with us to clinic and obtain the necessary medicine. We were so thankful these girls were willing to help this elderly man, whom they were unrelated to, but out of the goodness of their hearts, wanted to help. Their family took this man in and cared for him, and these girls were willing to hike to get him medicine. Again, we headed back home reflecting upon the goodness of the San Jose villagers.



Liz, Ryan, and Mary after treating the man for his rash

Mary Bonnet

Dental Program

We had no dentist this trip so curative dental care was not possible.

Parteras and Health Promoters

Similar to prior brigades, we invited the *parteras* (lay midwives) to participate in a meeting with several of our brigade members. The purpose of the meeting was to provide support for these community health workers, to answer questions and share information on the topic of women's health, and to educate us on the status of maternal-child care in the region. The meeting began with a detailed discussion concerning the evolving role of the *parteras*. The *parteras* that participated were self-educated lay midwives who, in the past, served as primary birth attendants to women in the region. The Honduran government has now outlawed home deliveries, changing the role of the *parteras* dramatically. Today they serve primarily as supporters for women in the prenatal and postnatal period, as well as educators on women's topics such as safe sex practices and family planning. These women were very forward thinking and attune to the needs of the women that they care for. For example, they frequently provide education at schools regarding sex and pregnancy prevention in young teenage women.

A detailed discussion was had regarding current women's health issues in the San Marcos region. One major issue that they encounter is that of high rates of teen pregnancy and low rates of contraception use among young women. A major form of birth control used by older adult women was reported to be tubal ligation; however, young women not desiring permanent contraception tend to be fearful of using hormonal birth control. They reported that this low rate of contraceptive use is generally not an issue of health care accessibility. Many young women have access to contraception but avoid it due to religious

beliefs or fear that it is not healthy for women. The *parteras* had many questions for our brigade members regarding these fears and the health effects of hormonal contraception. One quote from one of these amazing women stood out, which sums up their independent thinking: “It is not a sin to use birth control, but it is a sin to bring a child into the world that will starve.”

Ryan Cummings

Home Surveys

The survey Josh completed was compared to a similar survey done 8 years previously. His survey was much more robust. A few of the highlights are as follows. The full report can be accessed at www.sanjosepartners.org/what-we-do/josh-report.

- Educational achievement (Recent Survey only)
 - 98% reported primary school attendance (grades 1-6).
 - 42% reported middle school attendance (grades 7-9).
 - 5% reported high school attendance (grades 10-12).
- Self reported health status
 - Rated “very good” or “excellent” for 39% in initial survey compared to 55% in recent survey (Not statistically significant, “NS”).
- Income sources (Recent Survey only)
 - 80% unskilled day labor (earning \$2.50-\$3.50 per day and without guarantee of daily work).
 - 69% of households send at least one member to the coffee harvest in another department.
- Maternal and Child Health
 - Weight for age ≤ 2 std. dev. below the WHO median in 25% of initial survey and 10% of Recent Survey (NS).
- Water, sanitation and home smoke exposure
 - Open defecation in 61% of initial survey compared to 37% of recent survey ($p=0.006$).
 - Improved cook stove (reduced smoke exposure and improved fuel efficiency) in 16% of initial survey and 72% of recent survey ($p<0.001$).



Kevin with some new friends he met on the road

Cookstoves

The improved cookstoves we designed remain a very desirable “appliance”. We have solved some barriers during this trip and anticipate an increase in cook stove installation over the next six months. We have expanded cook stove building to two additional surrounding communities: Rancho and el Salitre. We are starting to work on the lists of eligible recipients. An educational demonstration class was held during our time in Honduras. We have installed over 240 improved cookstoves to date.

We have designed a new top (plancha) for the cookstove. It will allow more varied cooking methods. Finding a metal shop that can build the new design correctly remains a challenge, and we need to improve on the initial design some.

Background - People interested in getting a cookstove for their home must attend an educational meeting. After they better understand how to build the stove, they must build the mud or adobe block table that supports the stove. Then the villager pays about \$7 for the stove that costs about \$55 to build, and must complete a day of communal labor. The main expense for the stove involve a large flat metal plate which is the cooking surface (plancha) and the metal pipe for the chimney. The rest of the stove is made from local materials. This allows the stove owner to perform their own repairs as needed without outside financial help. Given our “see one, do one, teach one” approach, the owner has helped build at least two stoves and is capable of repairing any problems with their stove.



Manuel teaching about cook-stoves by building one

Agriculture

In years past we introduced new vegetable seeds to expand the types of nutritious foods available. These seeds were hybrids so the seeds could not be harvested from the vegetables and used for the next growing season. Over the past two trips we have brought over 15,000 heirloom seeds for over 20 vegetable types. These non-hybrid seeds can be harvested from the vegetables and used for the next planting. This trip we visited the Rancho school where the caretaker there has been busy experimenting with the seeds. He is having great success with the majority of the seeds. We request that recipients of the seeds share with others so we can expand the growing and consumption of healthy foods.

The largest fish farm we helped to start is doing well, except a jealous neighbor keeps cutting the hoses to interrupt the flow of water to the farm. We had multiple meetings with various people in an effort to stop the vandalism. We hope forward progress has been made.

Water Projects

Piped water projects

No new piped water projects have been built recently. The 5 we have built in the past continue to function, and people appreciate the benefits of not having to haul water. We continue to look for opportunities for other piped water projects, but the limiting step is the lack of naturally occurring springs. There is just not much water in the area.

Government Water Project

The piped water project that the government started more than 6 years ago still struggles with multiple problems. Residents of Guanacaste and San Jose Centro can get a small amount of water once a week for about 3 hours. This is a slight improvement from 6 months ago. Part of the problem has been an error either in the design of the system or the implementation. Due to significant elevation changes, the pressure in the main water lines was so great that the pipes kept



Boy in front of Rancho garden with butternut squash

bursting. Each community has to pay additional money to purchase new pipe that has a higher pressure rating.

Water Filters

The desire for water filters remains high. The area residents realize the benefit of safe drinking water. Josh did more work on water filters, including water testing. He encouraged people with filters more than five years old to come for replacement, based on his testing. We have many filters on site and many new people are purchasing the heavily subsidized filters, as well as replacing older ones.

Latrines

The demand for ventilated improved pit (VIP) latrines remains high. During the rainy season it can be difficult to dig the 10 foot deep hole because the open hole can fill with water and the walls can collapse. To date we have helped build over 135 latrines. We purchased additional supplies to build more latrines and expect many more will be built over the coming dry season.

Your Help is Needed

We believe in low cost, simple technology solutions that the Hondurans can learn and maintain on their own. We are doing a great job in this respect. However, even simple interventions cost money. To continue the exceptional work we are doing in Honduras, we need more funds. If you have the financial ability and appreciate the great improvements our activities are bringing to rural Honduras, please take a minute and donate to our project. Donations are tax deductible if you itemize your taxes. We are very fortunate to have the assistance of the Department of Family Medicine and dedicated volunteers to almost eliminate overhead expenses. Therefore, your donation will reach the Hondurans and not be spent on less helpful expenses such as rent for a dedicated US office or US-based secretarial support. If you would like to donate to the San Jose project, please make a check payable to “HH Foundation – GH Fund HFM”. Mail the check to “Highland Family Medicine 777 Clinton Ave, South Rochester, NY 14620 Attn: Douglas Stockman”.

Summary

The greater Rochester Family Medicine community has touched so many lives in Honduras and the Hondurans have enriched so many of our lives. This cross-cultural project is realizing huge benefits for everyone involved. The scholarship students gain confidence as well as a chance at a path out of poverty. The micro-loan program is also helping adults find a way out of poverty. Seeing the smiles and appreciation as people display their running water, new cookstove, or water filter is so rewarding. Through these very intimate person-to-person exchanges we maintain hope that a better world will become a reality one community at a time. Thanks to everyone for their continued support to make this project such a great success.

Douglas Stockman, MD
Director, Global and Refugee Health

Barbara Gawinski, PhD
Associate Director, Global and Refugee Health

Thanks to other trip members who wrote parts of this report.



October 2015 Group Photo:

*Carol, Xio, Chanh, Lester, Doug, Melisa, Liz, Alex, Mary, Ryan,
Kevin*