

# Honduras Trip Report – May 2018

Department of Family Medicine, University of Rochester

Participants	
<u>Faculty</u> Stephen Schultz Douglas Stockman	<u>Residents</u> Alissa Correll Lizzy Gabel Zoe Gravitz Chanh Huynh
<u>Unitarian Church</u> : Ed Wiltse	
<u>Interpreters</u> Diego, Heidi, Melissa, Paulet	<u>Dentist</u> Lina Vega

## 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 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 May 2018 trip.

## Travel and General Comments

Except for the delay of one bag, the trip to Honduras was uneventful. Lina's bag with many dental supplies and medicines took multiple calls to Delta and 4 days before we finally received the bag. The rainy season started in earnest the day before we arrived so we had rains most afternoons and some nights, as is common for the rainy season. The heavy rains meant we did not have to worry about having enough water to bathe and clean dishes/etc. There is no running water where we stay so we are dependent on rain water for bucket baths. We have been spoiled over the past few years with electricity. With the daily thunder storms we lost power intermittently, including a 2 day stretch. This limited the dentist's ability to offer advanced services as well as threatened our food supply. Close to half of the group developed upper respiratory infections during the trip. It seemed like this would be the first trip without anyone contracting diarrhea, but then in the last 2 days, including the days of travel, almost everyone got diarrhea.

## Education & Schools

### Scholarships

The much-anticipated day on which we would distribute the “Becas” (scholarship funds) to the students finally arrived. These students, who choose to continue schooling past the 6<sup>th</sup> grade (all that the government supports), either travel back and forth from our handful of villages on the mountainside to the “big town” of San Marcos each day or, for those who live too far, find their own accommodations there (see Lizzy's story of visiting one such student's tiny room). In addition to the challenge of making it back and forth across rugged terrain to school and keeping a 70% average in all subjects, these students commit to doing volunteer work in their home communities (coordinated by longtime local leader Don Manuel), and to providing us with their report cards and careful budgets accounting for how they spend their scholarship funds, as well as thank-you letters for their sponsors from the First Unitarian Church, the Department of Family Medicine, and a widening circle of other supporters.



*Prepping for scholar meeting while Alissa and Lizzy treat sick baby*



*Starting a scholar meeting with makeshift location*



*Scholars of 2018. Biggest group ever!*

It was thus a bit disappointing to find Don Manuel at the door an hour before the “Beca” meeting, reporting that some kids did not know to whom to address their thank-you letters. So I sent Melisa, interpreter extraordinaire, who has herself become a kind of community leader here after multiple brigades, with the list of sponsors to straighten that out, while I gathered materials (and a stack of Limpera) to distribute. I headed up to the Clinic where we would be meeting with each scholar and her/his parent or guardian to gather their materials, discuss their successes and challenges, and issue the funding, only to find Alissa and Lizzy providing emergency care for a sick baby, who immediately puked on the clinic floor. Happily, interpreter Diego sprang into action to deal with the mess and the doctors did their thing, and that space was ready for our use in plenty of time. I made my way next door to the school for the meeting with all the parents and students, only to find that the promised key had not arrived, so we would be meeting outdoors. Happily our friend Roney Amaya, middle school teacher and local supervisor of the Beca program, took control and steered everyone into a tiny courtyard space where there proved to be enough seats for elders and moms with small children, and standing space out of the sun for the rest of us. Roney offered some strong words for his community members about their failure to help each other when the scholarship packets were not distributed as planned, Melisa chimed in with a rousing pep talk about community building and collaboration, and then the meeting began with a lovely prayer of thanks from Antonia Garcia Cabrera, who began as a scholarship student in 7<sup>th</sup> grade, and is currently both a kindergarten teacher in the community and a university student. I offered some brief words on behalf of my colleagues on the Church's Honduras Ministry team, welcoming everyone, congratulating the students on their accomplishments, and expressing what a privilege it is to work with them and their families. I expressed our belief that education opens doors to better lives, not only for students but for the communities from which they come.

And then, while Melisa and Roney helped the students gather together and organize their packets, and some older students took Melisa's words to heart and helped the younger ones, Steve (helping disburse money) and I headed into two exam rooms in the Clinic with Paulet and Heidi to interpret. Lizzy and Alissa checked in each student on the porch and made sure we have correct family information, and Ben took photos of each for their sponsors. Steve and I had the remarkable pleasure of speaking to these 36 young people (the largest group of scholars yet). Some were struggling with grades, though the work that Roney does tutoring many of the children on Saturdays is clearly helping somewhat, and all seemed confident that they will make the state's cutoff grade to continue in school next year. And most were remarkably ready to talk about their futures, to see better things for themselves, their families, their communities. This was especially true of the growing number of students in 10<sup>th</sup> and 11<sup>th</sup> grades—a

very accomplished group of young women and men, mature and confident. While I swallowed hard at the prospect of finding funding so that they may all go on to university as a few of their predecessors have with our support, when I thought of the kinds of circumstances they have come from, and the extraordinary strength of character they have displayed to come this far, it seems the very least that I can do—and we can do—to find the money to help them persist. Ed

### Adventure in San Marcos

Part of the success of our program is ensuring that our resources are being used for the intended purposes. This includes ensuring the scholarship money is being used to support kids in their education. Prior to arrival, there were rumors from a community member that a student in the high school used his scholarship money for a new mountain bike rather than his rent, So one of our missions in San Marcos was to see whether this student was living in the town or riding his bike back and forth from his parents home in Portreros.

Upon arrival at the high school, it was surprisingly easy to find this student. After a brief conversation with the principal, the student was excused briefly from class to hike with us to the place where he was staying. When asked how far he lived, he replied “lejos,” which meant “far” and took off at a quick pace. After asking him to go a bit slower for the “gringos,” he turned on a street that quickly turned into a foot path that went straight uphill. Twenty minutes and a lot of sweat later, we arrived at a small cement walled house with a metal roof. An older lady was washing clothes with chickens at her feet. She welcomed us on to the property and the student led us around the back. An even smaller house sat behind the main house and he led us into a small dark room. He entered first and opened up the windows to let in light. In the small dusty room there was a twin bed on one side and small table covered with school books in the middle. And in the corner was a green mountain bike. The student reported that he pay 400 limpira for rent and 100 limpira for food per month (which is about \$16 for rent and \$4 for food) which was appropriate for the amount of his scholarship. He reports using the mountain bike (a gift from his parents) to ride back and forth from San Marcos to his parents home in Portreros on the weekends which is about a 2 hour walk.

So he did have a new green mountain bike. But he was also studying and living in San Marcos like he was supposed to with the scholarship money. And he walks to school for 20 minutes everyday (literally uphill at least one way). We thanked him for showing us where he lived and encouraged him to keep up the good work in school. He gave us Honduran directions (“just walk a few minutes there” which turns into 30 minutes) to make our way back to San Jose.

Lizzy

### Fiesta Day

I had the privilege of meeting with half of the scholarship students to distribute scholarship funds. Many of them were in 7<sup>th</sup> grade (their first year of scholarship), while others were juniors and seniors. I had the good fortune to meet with Antonia, who was in her first year of university, while also teaching kindergarten in Portillion. It was amazing to think that



*Crazy games as Scholars thank group for their support*

she is in her 7<sup>th</sup> year of scholarships! She is already contributing to her community, and has much more to offer.

Melissa, one of the interpreters, designed some very fun physical games where we played with Hondurans in front of dozens of others. It really broke down cultural barriers as we passed water balloons under our chins, and raced under the legs of our respective teams, all of us laughing in a way that transcended cultural barriers.

At the end of the fiesta, a mother gave a moving speech that she was unable to read and write, and yet her son was going to graduate high school this year, and planned to go to university next year. She said she never would have thought that such advancement could happen in one generation, and thanked us for this incredible opportunity for her children. I had tears down my face by the time she was done, so powerful was her quiet and sincere testimony of thanks. So many of the community said they did not know how to thank us, not realizing that they already had. Steve

### **Microfinance**

The microfinance program began in May 2008 as a joint venture between Highland Family Medicine residency program and the First Unitarian Church of Rochester. The aim of the program is to improve the economic well being of the Hondurans residing in the township of San Jose. The program allows families to start small businesses by making small loans available at very low interest.



*There is no flat ground in San Jose so going anywhere requires much effort*

On our first full day in San Jose two groups of hikers went out to deliver letters to loan recipients. The letters contained the amount of money owed by each recipient with the date and time of the microfinance meeting. One group went toward Portillon and Mangal. Another group went to Potreros and Guanacaste. During the community meeting that afternoon more of the letters were distributed to community members in San Jose and El Horno. Zoe and Chanh also posted a list of the people owing money and how much they each owed outside the clinic.

Over the course of the week, two members of the community paid their loans in full (yay!). These two people are husband and wife and parents of a scholarship recipient. The husband of the couple reported that he purchased plantain seeds which yielded about 200 trees. Each tree gives 100-200 fruits that they sell for 1 Lempira (4 cents US) per fruit in La Esperanza, and the business is going well. They felt that they were helped very much by the loans and were grateful to receive them. Six community members paid part of their loan.

The day of the microfinance meeting arrived. Chanh and Zoe prepared to lead workshops, and the whole brigade was eager to help. Unfortunately, no one came for the workshops. About one hour after the appointed time, two community members arrived. One was a woman who had defaulted on her loan in October 2017. She came to pay interest. She had successfully paid back loans on time in the past. When she was informed that she had defaulted on this loan she looked confused and claimed that she had been told loans were to be repaid one year after they were taken out. We explained that loans are to be repaid

six months after. The other community member had never taken out a loan before but had been seen asking other members of the community for a loan in seeming desperation earlier in the day.  
Chanh

There are several possible reasons why microfinance failed this year:

1. Many loan recipients were ineligible for loans this month due to defaulting previously.
2. Many people in the community who were eligible to apply for a loan may not have known about the meeting
3. Last trip in October 2017 was the first time that no loans were granted. People may have assumed that no more loans would be granted.
4. We receive frequent feedback that the loans are not large enough. Some people may feel that the program does not meet their needs.
5. The meeting was held in the afternoon during the rainy season, and it often rains in the afternoon.

### Microfinance focus meeting

We met with a couple women who are leaders in their villages to discuss the challenges to the micro-finance program. They realize a number of people are not trustworthy which leads to a high default rate. They admit that the lack of collateral also enables people to have no downside if they default on loans. We discussed the need to restructure the loan program. What we came up with is to expand the involvement of community members on our Board that determines who is loan worthy, request collateral in the event of defaulting, be more cautious with first time loan recipients, consider mainly offering loans to people who have shown success before with repayment, and consider less loans given out but larger loans to successful loan recipients. Additionally, we need to work harder at enforcing the pre-existing condition that loan defaulters cannot participate in other projects we offer until they repay their loans. A number of prior loan recipients have benefited greatly from our other programs while still owing money. We hope to continue to help these hard working people improve their financial situation.  
Doug

Thoughts on future directions:

1. Hold Microfinance meeting to discuss the future of the program (whether or not it is prudent to continue)
2. If so, hold a community meeting to get community suggestions about how to improve it.
3. If not, decide how to use the money remaining from microfinance.
4. Hold microfinance meetings in the morning during the rainy season.

- Zoe and Chanh

### **Medical care**

The clinic was very busy this trip. We had many sick people who we were able to help. A number of people had pneumonias, many children had ear infections, a few people had kidney infections, 1-2 people with asthma exacerbations, along with the usual viral infections and advanced arthritis cases. Residents injected a number of joints in an effort to reduce the pain of arthritis. We had to



*Alissa draining infected finger*

refer multiple patients to the regional hospital in Esperanza, about 90 minutes away by local transport.

### Some notable cases

“When in doubt, treat” is the adage where health care is only available by hiking for hours. We saw many children with vital signs consistent with sepsis for whom we could not find a source. One 6 year old girl had hiked up from Portillion with her mother, a 2 hour walk up 2000' vertical feet, with a fever of 104 F due to pneumonia. She looked exhausted, and was going to do the return trip right after she was treated. We all learned how to do the best we can with the limited medications we had. Steve



*Child with facial infection*

One lady was seen twice during the trip. Her initial visit was for 2 problems: bilateral knee pain and something coming out “debajo” (or from below). She has had 7 hernia surgeries in the past on her abdomen but when she showed me her abdomen, there was not too much to see other than several surgical scars. She continued to say “debajo” so we had her change into a gown like sheet. On exam, she had greater than a softball sized uterine prolapse protruding from her vagina. She told us that surgery was recommended by the local clinic but she hadn't had the time or money to do it. Unfortunately, there was not much we could do for the uterine prolapse but I happily injected her right knee and offered to inject her other knee in 1 week if it helped. She left the clinic and proceeded to walk more than 30 minutes home uphill with her uterine prolapse under her skirt. She returned several days later for a second knee injection, stating that the first one had given her much relief. She asked again about the uterine prolapse. We explained that a pessary might be helpful and that she would need to see a gynecologist for a fitting. Elia, a local nurse, believes that such services are available in Tegucigalpa and discussed this with the patient. The patient went home with a “Hoja de Referencia” for a pessary and two less painful knees. Lizzy and Zoe

I cared for two patients who presented with anxiety and panic attacks. One 36 year old woman presented with a chief complaint of dizziness and headaches. After digging deeper, this dizziness was accompanied by palpitations and nausea. These symptoms occur when she is in a crowded place and subside after she sits down somewhere quiet to rest. Unfortunately we did not have any medications to treat her panic attacks but recommended an SSRI or small dose of benzodiazepine. A 40 year-old man well known to Doug came to the clinic complaining of chest pain, right arm numbness, headache, dizziness, upper back pain, RUQ abdominal pain and several other somatic symptoms that occur when he is working or resting. He reports that he has had bloodwork, and EKG and other workup in La Esperanza in the past but that he is very worried that he may be having strokes, heart attacks or lung problems. He repeatedly asked me if anything is wrong with him. He was given low dose metoprolol. By the end of the visit he acknowledged that his symptoms could be due to “nervios.” Zoe



*Alissa and Lizzy working hard in the pharmacy*

### **Home Visits**

#### Girl with developmental delay

After a hike down into Portillon to visit school kids and apply fluoride, Ed, Paulet and Alissa followed Sehiley's grandma another 30 minutes to the Montoya family home and farm. 7 year old Sehily Montoya was identified a year ago as in need of medical care when a community member mentioned there was a concerning child at this location. At that visit, we discovered a well-cared for, however small and developmentally delayed young girl who was very likely profoundly affected with cerebral palsy. She is unable to leave bed or interact with her family beyond eye contact. Sehiley's Mom and Dad were not aware of Sehiley's diagnosis but were hopeful for more care and evaluation for their daughter. They are interested in having Sehiley cared for at a home for special needs children in Esperanza (the nearest city), as long as they are able to visit frequently.

During this interview, we learned that Sehiley has been having symptoms of grand mal seizures almost every night, which cause her parents and Sehiley significant distress and worry. Her parents continue to struggle to keep up with her nutrition, because it takes a long time to feed her and her nutritional needs are only increasing as she grows. She eats a combination of mashed up corn products, fruits and milk. She continued to appear well cared for without development of ulcers, however she has severe contractures of all four limbs and is nonverbal.



*Sehiley's house. Not an easy walk to reach.*



*Sehiley*

Paulet, one of our brigade's interpreters, has led the charge to offer Sehiley's family more support in their situation, and has involved her husband's missionary organization in helping to raise funds to have Sehiley moved to an alternate location that could provide physical therapy and round the clock nursing care. So far, Paulette has returned with further medical supplies and a camera crew to produce a brief video documentary on Sehiley's story for the church community (<https://vimeo.com/271954971>).

## **Dental Program**

### Curative dental care

We were able to treat 106 dental patients. We completed 125 Extractions, 20 ART. ( Atraumatic restoration ) and 3 composites . Extractions were the more common procedure but we also got some restorative with Glass Ionomer also we could use composite in some anterior teeth. Unfortunately, we didn't have electricity the last two days and that make impossible to do restorative procedures. Lina. (note: Lina had to leave 4 days early to return to work).



*Lina and Alissa treat a young dental patient*

## Dental care at schools

One of the priorities for this trip was dental care as we had Lina with us. It appeared that there has been a lapse in the schools receiving fluoride rinse for the past 1.5 years. Along with treating many, many patients in dental clinic, we wanted to provide dental education and care in the local schools. One way we did this was to give toothbrushes and toothpaste to the teachers to pass out in their classes. We delivered this at the teachers meeting in San Marcos. We also packed our backpacks full of fluoride varnish and hiked to most of the nearby schools and applied the varnish to several classrooms. Alissa volunteered first and did the grueling, 2 hour hike to Portillon. Zoe and Chanh took over San Jose for several days and provided varnish to all the grades. Zoe hiked fluoride rinse, toothbrushes and toothpaste to Guanacaste 1 hour away. And lastly, Chanh and Lizzy hiked 1.5 hours to Portreros to provide fluoride varnish to the kindergarten and 1<sup>st</sup> grade. We also taught about the function of the teeth, how many times a day to brush and what food is good and bad for teeth. Amazingly, there was only 1 child who cried during all the fluoride varnish applications!! (And that was Chanh's fault ;-). Lizzy

## **Parteras and Health Promoters**

There are only two parteras left in the area surrounding San Jose and neither of them has done a delivery in the past year because they are forbidden by the government. There used to be four parteras but two have passed away in the last 2 years. Ma Cecilia met with Zoe to review neonatal resuscitation. She stated that in the past month a partera many towns over attended a delivery where the mother died of post partum hemorrhage. This midwife is likely headed to jail and Ma Cecilia says she will only attend a delivery if it is an emergency. We reviewed fundal massage, bimanual massage, sweeping the uterus for clots and placenta, and looking for lacerations. We also reviewed neonatal stimulation, bulb suction and positive pressure ventilation. We practiced these techniques with the tools and baby model. Ma Cecilia left with tools in hand a new found confidence in attending deliveries.



*Paulet applies varnish to cooperative child as friends look on*

## **Cookstoves**

The improved cook stoves we designed remain a very desirable “appliance”. After trying for the past 5 years to build a plancha (flat metal sheet that is the cooking surface) with a removable circular opening for a round bottomed pot, we finally found a local welder to do the welding on the new plancha we have designed. Next comes the testing of the design to see if it works and meets the needs of the local people. If successful, we will build more and offer them to the local people. Unfortunately, the new design almost doubles the cost of the plancha.

In the past 6 months, 16 more cook stoves were built. We had enough planchas in San Jose from November but needed to buy more chimneys and local bricks to last the next 6 months. With a trip to Esperanza we now have enough materials in San Jose to make over 20 cook stoves in the next 6 months.

## **Agriculture**

### Heirloom seeds

We met with a number of local farmers and discussed the many options out there for various fruits and vegetables. They were fascinated to see all the produce listed in heirloom seed catalogs we brought. We distributed more seeds to interested farmers to



*Bottom view of redesigned plancha ready for welding*

experiment with and see what grows well in Honduras. Interestingly, the most desired seed was for an extremely spicy hot pepper. Hopefully it will grow well enough in this climate that it can become a cash crop in the Esperanza market.

### Organic Coffee Farming Cooperative

Prior to this trip, we did a web search looking for coffee cooperatives in the San Jose area. We found a group called COMSA about 90 minute drive from San Jose. At the initial community meeting we asked if people had heard of the cooperative, but no one had. We attempted repeatedly to contact COMSA (never easy via phone). While trying to reach them we came across another community member who told us a few of the farmers had already gone to COMSA and taken an all day class on organic coffee farming. Now our focus has shifted to spreading the word about COMSA to the many farmers who have never heard about it and whom they should contact locally to take the class. The long term goal is to help local farmers get better prices for their coffee.

A few of the trip members are self ascribed coffee aficionados. They tried the locally grown and roasted coffee and found it quite good. Most of the trip members ended up buying a few pounds of the locally produced coffee. Given we paid \$1.50 for a real pound (16 ounces) of high quality coffee, one realizes just how much the price of coffee we buy in the US is inflated by middle men while the actual grower of the coffee makes very little. When the local farmer sells the coffee to an area buyer, they get much less than \$1/pound. We hope we can improve on that situation.

### Solar food dryer

Given we have multiple grocery stores in Rochester, we can get high quality fruit year round. For the San Jose people, they only get fruit when in season. That means they may get mangoes for a month, and pineapple and bananas for a couple months, but the rest of the year these are not available. We are exploring the use of a solar food dryer so when fruit is in season they can dry the fruit for later consumption. We built a solar food dryer and initial tests are promising. A local person will experiment more over the next 6 months to see if the dryer will meet their needs. Ideally, the dryer could be used for the production of dried fruit for sale.



*Solar food dryer ready for testing*

### **Water Projects**

#### Ceramic Filters

Over the past 6 months we ran out of ceramic water filters. We buy filters made in Honduras, but they are about 6 hour drive away. Getting them to San Jose can be a challenge. We were able to figure out the logistics and have 60 filters in town to be distributed over the next 6 months as needed. We are also exploring a source for lower cost filters.

#### Latrines

Seven more latrines were built over the past 6 months. We purchased more supplies in Esperanza to continue the construction of latrines over the next 6 months.

#### Pilas

Pilas are the kitchen sink/counter top/washing machine of the Honduran kitchen. We worked with 8 local families to get the supplies needed to build each family a pila. Given cement spoils quickly in the

rainy season, and the huge desire to have a pila, we anticipate the 8 pilas have already been built by the time you read this. We also built a couple more gutters from low cost 4 inch PVC pipe. Pila owners often fill it with rainwater and therefore need a gutter system.

**Update on Project Status**

Project	Completed	Project	Completed
Cookstoves	328	Scholarships	100+ students, 36 current scholars
Filters	352	Micro-loans	196 loans, \$10,658
Latrines	145	Fish farms	6
Pilas	92	Piped water systems	5 communities
Heirloom seeds	>15,000 given		

**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 Hondurans, 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”.



*Beginning to carry 100 lb bags of cement up hillside. Each pila requires carrying 6 bags*

**Summary**

The greater Rochester Family Medicine community has touched so many lives in Honduras and the Hondurans have enriched so many of our lives. As is true for all development projects, there will be set backs. These are learning opportunities and allow us to improve future interventions. This cross-cultural project is realizing huge benefits for everyone involved, even with a few setbacks. The scholarship students gain confidence as well as a chance at a path out of poverty. Seeing the smiles and appreciation as people display their running water, new cook-stove, 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 much of this report.



*Front Row: Melissa, Heidi, Paulet, Zoe, Ben, Diego  
Back Row: Ed, Doug, Lizzy, Alissa, Chanh, Steve*