

# Honduras Trip Report – Spring 2024

Department of Family Medicine, University of Rochester

Participants	
<u>Faculty</u> Jeanne Beddoe Doug Stockman	<u>Residents</u> Catherine Klapheke, Adriane Spiro, Sheema Shabahang, Emily Triplett
<u>Interpreters</u> Diego, Leo, Fatima, Tanya	<u>Unitarian Church</u> Moritz Wagner
<u>Dental</u> None	<u>Cook</u> Melissa and sister Ana

## Introduction

The Department of Family Medicine at the University of Rochester operates a Global Health Program. This year-round program 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 Intibucá, 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 have created interventions designed to address the common problems. Below is a report from our Spring 2024 trip.



*Bus full of supplies heading to San Jose*

## Travel and General Comments

Due to a problem with the airlines our trip was delayed and shortened by 3 days. We only got 7 full days in San Jose. Once we were able to reach Honduras things went fairly smoothly. About 18 months ago the Honduran government required us to get approval before importing medications for use in the clinic. Upon our arrival in Honduras we still had not received the required documents from the Honduran government. The Honduran lawyer we hired to help with the process sent copies of the submitted documentation to one of our interpreters who met us at the airport and had to hand off the documents to Doug across a security check point so we could present the documents to the customs agent. As often happens, one group member was singled out and pulled aside then forced to pay a small fee in US dollars. At least we got our medicines into the country. Unfortunately, the approval process cost about double what the medicines cost.



*Happy Hikers! Note the smog-filled sky*

Although Honduras is warm to begin with, the country was experiencing unusual heat and humidity. In the bigger cities the

stagnant air mass caused significant air quality issues. Fortunately, San Jose is a bit cooler given the elevation but we still sweat all day long. We had intermittent rains for the second half of the trip. Electricity went out two days in a row. This was just enough to help us appreciate having electricity. The great news is we had enough water for bathing! Sisters Melissa and Ana cooked for us. Some day we hope they can come to Rochester and open a restaurant. Their food is that good.

## **Education & Schools**

The First Unitarian Church of Rochester has been partnering with the Department of Family Medicine at the University of Rochester since 2008. Initial financial support from the First U aided in efforts for cistern construction, water pipes, and faucets to run water in family homes. Thereafter, a committee was developed to work on a scholarship program to advance children's education. Most children in San Jose only attended school up to 6<sup>th</sup> grade. In grade school there are multiple children of different class years in the same classroom. The children of the Unitarian Church in Rochester have also been exchanging letters and artwork with the children in the area and teachers from the church have been helping with curriculum development. I was honored to be the representative of the church for this trip (my 4<sup>th</sup>).

The first thing I did the day after our arrival was to go to San Marcos de la Sierra and talk to the principal Eliud to learn more about how the students were doing. Eliud said that overall the students were doing ok and that he would try to get us the grades before we leave back to the US. He would also distribute the scholarship application papers to the students. The students had to fill out the forms with their parents and get all the signatures for school attendance, required volunteer hours, and proof of staying in San Marcos (if applicable, those who have to walk more than ~1.5 hours each way). They also had to write a letter to the scholarship sponsor and a list of items they spent the money on. The deadline was Sunday morning at 9 AM when they had to show up for the distribution of the money with one of their parents. Of the 37 students that started with a scholarship in January, 28 students came back in May to pick up the second installment and 2 were added who missed the initial application in the fall not by their own fault. (Collection of the papers and distribution of the money in picture below). The total money distributed during the May trip was a little over \$5000.



*Moritz running the scholarship program from the clinic porch*

One of the students this year applied for the University in San Pedro Sula to study Psychology. This is a huge step for a student coming from the rural mountains of Honduras and there really is no support system for a person like her. She only took one class in her first trimester although she should have known that the requirement for the scholarship was to take a full-time student load of 4 classes or more. So we had to have a long talk about budgeting, working, getting money from parents and friends, living frugally etc. We also talked extensively about developing a study plan (although I learned later from the University website that the study plan already exists and is clearly laid out for the student). I also emphasized that she had to be commitment to her studies and the need to study hard. She then signed up for 3 more classes for the next term and the hope is that she can successfully pass all the classes.

## Curriculum for Elementary School Students and Regional Teachers

For the curriculum development I taught a class for the 4th and 5th grade about flight and how a wing works. After a short explanation of the theory behind it all the students built their own paper airplane. Then they all went outside and had a little competition to see whose airplane flew the farthest. What fun!



*School children with their paper airplanes*

### **Medical Care**

Given the shortened trip and the fact we did not have a dentist, our total number of patients seen was lower than usual. We stayed steady busy most days though.

#### Medical cases

##### Sheema

During one of our clinic sessions, I was able to see a patient with a third-degree heart block, who is well known to the brigade. We performed a handheld EKG, which was consistent with heart block and a baseline HR of 40-45bpm. Amazingly, he did not report any symptoms of chest pain, syncope, or signs/symptoms of heart failure!

The clinic also saw a huge influx of patients coming in for rashes and gastrointestinal symptoms. A memorable encounter was an elderly woman who presented with a painful, crusting rash on the side of her chest. She reported a history of varicella exposure from a family member a month prior. Given the dermatomal distribution of her rash, my leading diagnosis was post-herpetic neuralgia and we prescribed a course of gabapentin and topical capsaicin cream for pain management.



*Getting a rhythm strip from a patient*

##### Emily

Returning to San Jose at the end of training allowed Sheema and me to practice our attending skills. A particularly memorable experience was helping Adriane perform bilateral knee injections on one of the town's matriarchs, Cipriana. Despite her uncontrolled diabetes, the steroid injections are vital to her quality of life. I helped identify the anatomical landmarks and watched with pride as Adriane expertly



found the joint space. With Leo interpreting her witty humor, the patient filled the room with laughter as we all learned together.

There are times when it feels like we do too little too late. A 30 year old woman came to request birth control. She had been hoping for the Nexplanon implant since her prior pregnancy, the child bouncing on her knee just over a year old. Though we cannot offer implants or IUDs, we do have Depo-Provera injections that would hopefully buy her some time to find a clinic that can. She was eager to start any method as her period was a couple days late. As with any birth control initiation, a urine pregnancy test was performed. My heart sunk as I noticed a faint positive on the first test. A repeat produced the same result. A third control sample was clearly negative. When I explained the results, she seemed unconvinced, sure that her period would come in the next couple days. I encouraged her to seek prenatal care and she nodded in understanding before responding, “I will still wait to see if my period comes. ”



*Adriane doing a knee injection and overseen by Emily, with Leo interpreting*

Another day, it was the patient who was nearly too late.

A 42 year old man had misunderstood the clinic hours and arrived after we had shut down the clinic for the trip. He explained his hearing loss over the last few days. I figured I could peek in his ears to see if there was any treatment I could offer. Upon exam, I was surprised to see green curls of a fibrous material with what appeared to be small stems. “Is there any chance, you might have leaves in your ears?” I asked hesitantly. He looked just as confused as I felt. It wasn’t until I started to remove small bundles of leaves that it seemed to click: “I work in construction where all manner of debris flies around my head...or I went swimming in the river last week – maybe they were in the water?” he reasoned. No matter how they got there, he was relieved to find his hearing significantly improved after our visit.

### Home Visit

One of the highlights of the trip was the hike to Portillon, where we visited a girl with cerebral palsy and her family. The patient was all dressed up for the occasion and seemed to be doing well, with no wound care concerns. We brought a number of supplies, but unfortunately we didn't bring antibiotics and it was clear she had a raging ear infection. We arranged with the family to send more supplies the following day with a community leader. In between our visit and the last brigade, Doug had installed solar panels on the family's house, and it was great to see how well they were working. She spends her time in a room with only one window, so the light bulb really made a difference in brightening up the room.



*Sayli and a very supportive family*

## Dental Care

### Curative Dental Care

No dentist was able to join our group this trip. Given the difficulty finding US dentists who can take time off work, we may hire Honduran dentists to join our group in future trips.

## Personal Observations

### from Moritz...

This was my 4th trip, the last one in 2012. Here are some thoughts/impressions about the changes over the last 12 years:

- The volunteer house is a great addition and makes the stay more pleasant. Some of us slept in tents on the screened in porch which was nice and cool.
- Fairly reliable electricity was a big bonus (only sporadic 12 years ago, none earlier), and the roads were in decent shape, fewer dirt roads.
- Motorcycles and 3-wheeled taxis now go everywhere. None 12 years ago.
- Children were much more approachable; they came up to me and gave me a hug! Before most of them were pretty stoic and shy.
- Climate change and modern conveniences: delayed rainy season, dense smoke from the farmers burning their fields, and lots of wrappers and plastic bottles.

### from Sheema...

This was my second time going to San Jose, Honduras during my residency training. The first time I went was during my intern year and it was an absolutely incredible experience working and providing clinical care to the members in this beautiful community. I knew immediately that I wanted to come back and continue the work to support the health and growth of the community.

It was great coming back and reconnecting with our interpreters Diego and now cook Melissa, in addition to meeting our new interpreters Leo, Tanya and Fatima. We spent the first day back setting up the clinic and pharmacy and our clinic was open for business the next day. Unfortunately, due to a flight cancellation and lack of a dentist on the team, we did not have many patients coming through the door for the first couple of days, but as the word spread throughout the village of our arrival, we got busier and busier as the week went by.



One of the highlights of the trip was the afternoon we spent with the children in the community. After lunch, a group of children from the neighboring school gathered around the house and were hoping to play some games with us. We got creative and played monkey in the middle, tag and taught them how to play duck-duck goose. It brought me so much joy and happiness to help bring fun and laughter into their day. It was incredible how despite a language barrier, we were able to communicate with these kids in our own way and still have such an amazing time together.

*Duck Duck Goose with area children. Everyone had a great time!*

Another notable highlight was when Melissa and her sister Anna taught us how to make homemade tortillas! My tortillas looked more like maps than perfect circles, but they were still delicious nonetheless.

We also helped Moritz review student applications for scholarships, which was another great opportunity to connect with members of the community. The students had to provide paperwork outlining their academic standing in school, attendance rates, and documented hours of community service. It was wonderful to see the dedication these students and families had coming from far away villages to their education.

I'm so grateful and appreciative that I was able to return to San Jose. I am hopeful that in the future I will be able to return as an attending and continue the amazing work being done in this beautiful community.



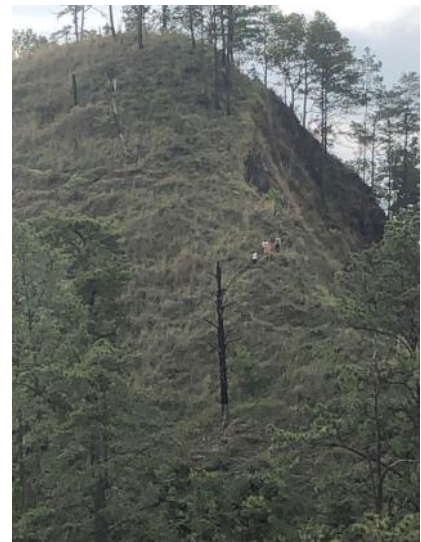
*Adriane and Katie trying their hands at making flour tortillas*

from Katie...

This was my first time in Honduras, and it was a very meaningful few weeks. Our first night, when we met up with the Honduran portion of our team, I was instantly comfortable when I saw how it was a reunion for all of them with our two returning residents. Everyone was so welcoming to each other. The drive to San Jose was beautiful, and the roads were in really good condition. On arrival in San Jose, it was great to see the students who were receiving scholarships to study in San Marcos ready to help unpack and unload. And the first night, I really felt the warmth of community when we were all sitting around the dinner table enjoying each other's company.

In clinic, I enjoyed getting to know whole families that would come in to be seen all together. I often had enough time to spend a little bit of time getting to know them and especially teaching about different ailments they were coming in for. I enjoyed having the time to really explain about different parts of the body and health in general. I also just enjoyed the team atmosphere with the interpreters, residents, and attendings. The interpreters were very invested in the health of our patients as well, and I really appreciated the cultural context they would add. I was surprised by the number of injections we performed, but it makes sense that the rate of OA would be higher with the physically demanding work people do in the hills of San Jose.

Finally, truly the best part of the trip was getting to learn about and become friends with the group. From the hikes to birding to playing board games, it was lovely having the opportunity to get to know people better and enjoy our time together.



*Residents hiking a nearby hill. Why I asked: "Because it is there" they replied.*

From Emily...

I was so lucky to get the chance to return to San Jose for the second time during my residency. It felt like visiting family to reunite with the interpreters and patients I had worked with previously, while forming new relationships. It is this sustainable continuity that drew me to the global health program despite having no such experience in the past.

## **Rural Development Projects**

### *Fogons (cook stoves)*

The cook-stoves we designed years ago remain one of the most popular interventions. Over the past 6 months another 18 stoves were built. We bought enough materials this trip to build 5 more cook-stoves. The stoves reduce smoke exposure in the home, reduce burn risk, and use less firewood than an open fire.

### *Pilas*

Pilas are cement water storage tank/kitchen sink/laundry area made on-site. Many people cannot afford the \$125 in materials to build a pila. Since we started subsidizing pila construction many more people have built pilas in their home. Our foreman, Edis, helped complete another 6 pilas since October and we purchased enough materials to build 10 pilas in the coming months. We bought a product to try that may stop leaking in older pilas. Ideally this will reduce total cost to help people have a functioning pila.

### *Latrines*

Edis helped complete 2 latrines since October. We bought enough materials this trip to build 5 more latrines.

### *Water Filters*

Most of the water people use in the area for drinking is contaminated and can lead to diarrhea, especially in children. Many years ago we introduced ceramic water filters that are made in Honduras. In September we ran out of filters so we bought another 150 last October and had them transported 8 hours to San Jose. Edis sold 30 filters in the past 6 months. While we were in San Jose we sold another 10 filters. Given this relatively small investment reduces diarrhea in children and possibly reduces childhood deaths, it is money well spent.

### *Barrels and Gutters*

Edis gave out 24 barrels and PVC pipe to make a gutter over the past 6 months.

### *Solar Electricity*

A significant proportion of the people living in the communities we have partnered with do not have access to electricity from the government/electric company. Part of the reason is because of the cost to a home owner, but mostly because the houses are so widely spaced apart along rugged mountains that the electric company does not find installing wires in the region cost effective. Having no electricity means these people are in the dark from about 6 pm when the sun sets



*Solar Install Sayli's house  
completed Jan 2024*



until about 5 am when the sun rises. Even during the day the inside of homes can be quite dark. Additionally, people have no way to charge their cell phones. A few years ago a company installed simple solar electric systems into a limited number of interested homes. Although recipients found the intervention transformative, only a small number of houses benefited from the intervention.

As of January 2024, we have installed 27 systems and have enough supplies in San Jose to install another 7. Because of the shortened trip due to a 3 day flight delay, and the necessities of other responsibilities we were unable to install any systems this trip. We met with many people and arranged for installs in September. This trip we also struggled to find a carpenter to make the battery boxes so we started making our own boxes.

The systems we have designed are quite simple. The homeowner gets a solar panel, battery, associated wires and controller, 4 LED light bulbs, and the ability to charge devices using a USB plug. The system costs us about \$500 not including shipping costs. The home owner pays about \$42 for the system. We do the installation, following a required education class. Reports from prior solar system installations have been very positive. Word has spread about the solar program with about 125 people on a waiting list. The hardest part for many of the installs is hiking to remote locations on very steep mountain sides. Unfortunately, the Honduran we started training to do the installs has backed out. We have some leads for other interested people.

**Agriculture**

Coffee harvest starts around mid November and ends in January-February. The coffee we brought home this trip is from the winter harvest. We will have about 80 lbs of Lempira organic and about 100 pounds of Indio for sale in the next few weeks. The coffee that Doug sold earlier this year returned about \$12/lb compared to \$2.45 they would make if sold locally. The Farm to Table approach really helps these hard working local farmers. Thank you for supporting this effort.

**Politics and Land Issues**

In 2009 we worked with community leaders, Honduran lawyers, and the Honduran government at the national and regional level to obtain a 99 lease to the land we built a volunteer house on. The local school system feels the land belongs to them. They have a document from the Department of Education that grants them a large swath of land that is considered by local people as being communal land. We are beginning legal means to resolve this issue.

**Update on Project Status** (updated 05/21/2024)

Project	Completed	Project	Completed
Cook stoves	450	Scholarships	175+ students, 35 current scholars
Filters	595	Solar systems	27
Latrines	201	Fish farms	6
Pilas	238	Piped water systems	5 communities
Heirloom seeds	>18,000 given	Barrels and gutters	>80



## **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”.

## **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 setbacks. 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 for 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



Front row: Leo and Tania

Back row: Melissa, Doug, Adriane, Katie, Jeanne, Emily, Sheema, Diego, Moritz, Fatima, Ana

Other Photos from Trip



*Moritz is a private pilot. He built his own plane. His evening talk was about that experience.*



*Three generations*



*Adriane and Melissa testing a chocolate cake Melissa cooked over an open fire*



*Community meeting building support for all we do*



*Emily's evening talk was on Point of Care Ultrasound (POCUS)*



*Doug building battery boxes using a makeshift "workshop". Local kids helping out.*