



Health Sciences Center for Global Health

The Global Address

Wowie Malawi!



Getting there from here!

Feb. 8, 2:20 PM-3:37 PM
Columbus to DC

Feb. 9, 5:40 PM-6:10 AM
DC to Senegal

Feb. 9, 7:10 AM-5:40 PM
Senegal to Johannesburg

Feb. 10, 10:00 AM-12:25 PM
Johannesburg to Lilongwe, Malawi



Culture shock

Julie and I are safe in Malawi! We made the long trek to Lilongwe (several movies, attempted naps, and hours of listening to African Chill radio on the airplanes). We got settled into our guest house, jumped in the pool, and walked to the downtown area in search of money exchange and the bus station we have to take tomorrow to get to Mzuzu. Weather isn't too bad—pretty muggy when there's no breeze, but very comfortable. Lots of poverty EVERYWHERE. And everyone just stares at us.

February 15, 2012

WOW. The hospital is incredible—as in very few resources. What a sight to see. Where to start? I guess I will describe the hospital first, and then give you a glimpse of what we've seen and done each day.

Ekwendeni is a primitive, resource-poor place. BYOB: Bring your own blood donor.

BYOCT: Bring your own caretaker.

BYOEverything: Bring your own bed sheets, clothes, food, drinks.... Patients have family members or friends here 24/7 to help take care of them. Nurses strictly take vitals, put in IVs, and administer medications and fluids (many of which they have mixed themselves). Family members do everything else for the patient. In between all the buildings there are people lounging, wandering around, and hanging laundry to dry. There is a building for families to store their own grain and maize. There is a porridge factory, but it is often not functional (like right now). MDs do everything—they are the internist, surgeon, pediatrician, obstetrician all in one. There is a female ward, male ward, both with beds in the back porches for TB



Fourth-year medical students Stephanie (Stevie) Dreher and Julie Javorek participated in a global health rotation from February 8 through March 12 at Ekwendeni Hospital in Ekwendeni, Malawi. The following are excerpts from their [blog](#).



Malawi

patients, a maternity ward (with private birthing rooms—very luxurious), neonatal "ICU" where there are basically just beds for mothers to lay and kangaroo the preemies for warmth, since there are no incubators. All babies sleep in bed with mother. There is also a building for expecting mothers 8 months+ pregnant. They can come here prior to labor because if they go into labor in their home village, they may not make it to the hospital in time.

There is a pediatric ward, which is the most busy, especially now during malaria season. There are two operating theaters (major room for C-sections, another for minor surgeries like hernia repairs and Incision & Drainage of abscesses; all surgeries are done by any physician or medical officer (Malawian physician assistant). There is an outpatient department and several clinics, such as Antiretroviral Clinic, Palliative Care, and Family Medicine. The Emergency Department is basically a room of supplies that is kept unlocked so people can access some supplies if absolutely necessary. No medicines are kept there. Most of the time, patients are carried directly into their respective wards. There is a small pharmacy and a lab that can process only Hgb, Hct, urine dipstick, CSF studies, stool studies, blood films, VDRL, HIV, TB, and CD4 counts. There is one ultrasound machine and one CXR machine, but currently there are no films to take X-rays.

Staff: 3 physicians; Dr. Carol is from Scotland
[Continues on page 2](#)

Continued from cover

and has been here two years, Dr. Martha who is from America but away this week so we have not met, and Dr. Anneke from Holland who we have been spending the most time with. There is one nurse per ward and about three medical officers that share call (and surgeries) with physicians.

Day 1: After a tour of the hospital, I joined Medical Officer Albert for Adult Ward rounds: two women with TB, and a man with an enlarged prostate (was transferred to Mzuzu), two drunks, psychogenic heart palpitations, shin lacerations, asthma exacerbation, and two very sick HIV/TB patients. Then I joined Julie and Dr. Anneke in the pediatric unit where rounds were taking place. This occurs in one large room, where parents sit in a circle with their sick child on the lap and we literally go around the circle (ROUNDS, ha ha) one at a time. There are some interesting cases but mostly children with malaria. The sickest ones have malaria that has gone to their brains. There was one child with a sickle cell crisis who probably had a stroke because she couldn't move the left side of her body. At one point, a child came in convulsing, most likely a complication of malaria. Anneke did a crazy fast perfect LP (lumbar puncture). They actually took oxygen off a sick child to give to this sicker child. Then the power went out and no one had oxygen until the generators kicked in!

Here "scrubbing" means washing your hands with a bar of soap. In the theater we adorn ourselves in a scrub-like dress, welly boots, a plastic apron that is wiped "clean" after every surgery, a cap, mask, glasses, and double gloves. Everything but the gloves are washed again and re-used.

Highlights from Day 2: Valentine's Day! I saw lot's of patients with TB. Julie performed a successful lumbar puncture on a 2-year-old with convulsions, probably a complication of malaria. We went to round on the maternity ward and walked in to find one girl who had lost two liters of blood overnight after giving birth. She was taken to the theater and two cervical lacerations repaired. Around 5 PM, Julie and I admitted an 81-year-old lady (very rare in Malawi, considering the average lifespan is 46 years!) with severe watery diarrhea. Probably hypoglycemia and dehydration secondary to dysentery... but had to rule out... you guessed it! MALARIA. The nurse started her on fluids. I don't think she was seen by a physician until the next morning.

This morning was also a crazy morning in the pediatric ICU (one table where the sickest children receive fluids and blood). Two children came in with severe malaria—one convulsing, one in respiratory distress and severely dehydrated. This time I got to do the LP on a 26-month-old (champagne tap, might I add—well... it was clear and one stick—there's no CSF cell count available). Julie constantly ran back and forth from the lab with blood and the single glucometer in the hospital. The pharmacist was on lunch break and not responding to Dr. Anneke's calls. I was filling fluid bags and adding quinine or dextrose, literally approximating IV drips. One child still needs blood, but hopefully the lab tech will return and the child will be ok when we check on him this afternoon. I've certainly started to experience dealing with really really sick children. It's scary. These extremely lethargic children would definitely be admitted to the ICU at home, but instead, here, they lay on a single table together, receiving fluids and/or blood, quinine for malaria, and get their vitals and blood sugars checked. PHEW! Has it only been 2.5 days?

February 29, 2012

On Tuesday there was fuel for the mobile clinic! At 9:15 AM we were told they would be leaving at any minute, so Julie and I rushed over,

ready to go. But typical Africa time, we were FINALLY on the (very bumpy) road to Luhomero village by 11 AM (after stopping once for a live chicken—lunch!—and once for vegetables and rice at the market). The "clinic" was really an empty building with four empty rooms, but was crowded with mothers and their babies waiting to be seen. Children were weighed (by hanging them from a hook with fabric pieces), screened, and received various immunizations. Unfortunately, Julie and I were not extremely helpful talking to the young mothers (in the villages hardly anyone knows English, and we only know how to ask a few questions in Chitambuka which are only helpful with yes or no answers). However, we did perform the antenatal exams on the expecting mothers—weight, blood pressure, gestational age, fundal height, and listened for fetal heart tones—with a hollow hourglass contraption, not Doppler! It's definitely a learned skill, but we are just starting to get the hang of it. We also were able to give a couple of vaccinations, so we weren't totally un-useful! It was a great experience and we were very glad there was fuel to go that day! Over just the course of two and a half weeks, we've seen hundreds of patients get well again. While we can constantly comment on Malawi health care, one of the poorest of the resource-poor countries, we can also celebrate the healing that occurs in hospitals like this one. Everyone is just doing their job with what they have—and very well!

March 7, 2012

Our last two days in Ekwendeni were a blur. On Thursday, Julie won our coin toss to scrub in with Dr. Anneke for a C-section. We also learned a valuable lesson about delivering bad news in Malawian culture. One of the Malawian nurses was upset because a physician had spoken to a terminally ill patient's family, explaining that the patient was dying and there was nothing more we could do to treat her disease, but we could make her more comfortable. Although this is a totally appropriate conversation in Western medicine, people do not speak so openly about death in Malawi. One is supposed to explain to family members that the patient is "very sick," nothing more. While we might consider this an inaccurate portrayal of reality, the seriousness of the situation is implied in Malawian culture. The family should "just understand." From their perspective, only God decides who is dying—not the physician. It is not the physician's role to state this. Definitely not what we learned in CAPS class! This is yet another example of the intimacy between religion and medicine in Malawi.

Saturday afternoon and Sunday morning were beautiful and perfect sunny days on the beach at Cool Runnings Lodge in Senga Bay. During meditation and relaxation exercises we are often told to "picture our beach." Well, I've found my beach. I can't think of a place more intricately breathtaking and relaxing than the scene I experienced this weekend. Imagine a soft, padded, immeasurably comfortable lounge chair. I lay in the cool and breezy shade of a very large tree under a canopy of huge, beautiful, green, feathery leaves. Scattered among the giant leaves are large, brown, banana-like seed pods. Peeking between each feather and seed pod is the bright African sun. Looking forward, past the shade, across the sandy beach and the clear blue water of Lake Malawi, past the rocky white and bushy green Lizard Island, you see miles into the distance rolling rounded mountains on the opposite lake coast lining the horizon. Above these mountains are crazy and intricate white cloud formations silhouetted by the bright blue sky.

Breathe in the beauty! Listen to the laughter of Malawian children splashing in the water and the faint distant thunder. Feel the cool breeze. Maybe a small butterfly flutters by. Breathe out and smile! No worries. No hurries. It all works out. This is Malawi.

Wowie Malawi!

The following are excerpts from the [blog](#) written by Julie Javorek.

Time only matters to people who wear watches.

Before we left, we were told by several people that the concept of time in Malawi was different. We understood what they meant to a degree (mostly from trips to the South!), but had no idea how much patience would be required. For example, we had to take a bus from Lilongwe to Mzuzu yesterday and were told that it was a 5-hour trip. We were instructed to get to the bus station 'early,' so we arrived at 6:40 AM (quite impressive in itself!). We were the first 2 people on the bus and sat for 2 hours before the bus even left... and then the ride took 7 hours instead of 5. People got on and off at multiple different stops, probably for bathroom breaks, but Stevie and I were way too nervous that the bus would leave without us so we sat for 9 hours straight... I know that will make my Dad proud, since we were taught to 'hold it' on road trips! :)

Americans should really learn to 'use their heads' more.

The people of Malawi can carry ANYTHING ON their heads. Not just fruit baskets or pottery... yesterday we saw a woman walking with a full-sized suitcase balanced atop her head. Coming from the medical student perspective, we're clearly worried about cervical spine damage and other injuries, but it's seriously impressive.

Contact/droplet isolation

American version: These terms are used to describe patients who currently have infectious diseases that can be transferred to other people in the hospital, and are used to prevent disease transmission. For example, anyone with signs of influenza, tuberculosis, etc., would have one of these signs hanging outside their door, and anyone who goes in or out of the hospital room would have to put on a gown, gloves, and a mask. Some of the patients with more serious conditions (tuberculosis) are even placed in rooms with negative pressure air filtration systems, and single-patient stethoscopes are used.



Malawian version: Tuberculosis is common here, and there is a specific "TB ward" in Ekwendeni Hospital. However, this ward is located at the very back of the property, so there is concern that the sickest TB patients (who usually also have HIV/AIDS) do not receive as much attention as they would if they were closer to all the other patients. Therefore, the sickest TB patients are placed in the regular ward with everyone else... kind of counter-intuitive. They are placed in "private" side rooms on the end, but the windows are left open, and often during rounds the patients are not even in their rooms. When we asked Dr. Anneke where the patients go, she said they often go to the market for lunch... so basically from now on, Stevie and I will be donning our N-95 masks 24/7, and especially in the market at lunchtime.

How to hold onto the Sparkle

Much of this week, we have been in the pediatric ward focused on a very sick child named Mickness. She had a complicated case of cerebral malaria, and had been seizing for over 24-hours when she came in on Monday. Throughout that day, her condition remained grim, and by the end of the day there was little hope that she'd make it through the night. However, Dr. Anneke told us that she still had what she called "a sparkle of hope." We thought about that patient a lot overnight, and were amazed and ecstatic to see that she was alive and improving the next day. Thinking about what Anneke had said the day before, we realized how resilient children can be. Was Anneke's hope stemming from the wisdom of a pediatrician who has seen similarly sick children survive, or is that "sparkle of hope" something that everyone can strive for?

How to use a mercury thermometer

This seems self-explanatory to all you adults, but for us children of the digital generation, it's not so obvious. Stevie and I were helping collect vital signs in the pediatric ward one afternoon, and all of the digital thermometers were broken. The nurse handed us two mercury thermometers without any further instructions and we proceeded to go child to child checking temps. After about four children, I noticed a strange pattern... all four of the kids had temperatures of 39.4 degrees Celsius. I turned to Stevie and asked her if she was having the same problem, and she said "yes, mine are all 38.5." Not sure if the thermometers were broken or if we were doing something wrong, we asked the nurse, who looked at us with an expression somewhere between shock and pity. She then informed us that you have to shake the mercury back down between uses... who would have known?! In retrospect, I have vague memories of my mom flicking her wrist with the thermometer when I was little, and I always just assumed she was waving it dry after cleaning it. What's even funnier is that even now, I always shake my DIGITAL thermometer dry instead of wiping it because that's how my mom always did it... little did I know that the wrist-flicking technique only applies to MERCURY thermometers.

Getting Too Comfortable?

Our first day in Malawi, I tried to buy a postcard at the market and was swarmed by about 10 men trying to shove their postcards in my face... it was terrifying, and I pretty much ran away empty-handed. This week, I returned to the same market to buy postcards as a seasoned haggling veteran, and when they swarmed me I firmly told them to wait their turn and then let them line up and hand them to me one by one... didn't faze me a bit. Similarly, a couple weeks ago we were appalled to be sharing a taxi to Nkhata Bay with a live chicken. This weekend, Stevie and I shared a rainy ride in the back of a short-bed pickup truck with 11 other passengers, all of our luggage, 2 bicycles, and several baskets full of bananas... and laughed about it. It's strange how quickly people can adapt to their surroundings, but it's also frightening when the same principle applies to sick patients. When we saw our first child who was very sick with cerebral malaria—seizing and with labored breathing—we were thinking of him all day, wondering if he was OK and thinking of the medical interventions that could be made in the United States. However, it became a pattern to us that all of the cerebral malaria patients recovered, and we got used to seeing it that way. When we came back from lunch last week and learned that one of these children had died while we were gone, it was somehow shocking—this wasn't what we've been seeing, and we had already forgotten how scared we were with that first patient. Although we have adapted in small ways to life in Africa, Dr. Colin told us something that rings true... the poverty and sickness that exists here should ALWAYS shock and upset us; no matter how much of it we have seen.

Global Health: the Undergraduate Perspective

In July of 2009, a small group of Ohio State students departed on a plane bound for a new chapter of life and an altered perspective on the world.

by Katie Ferman



Their destination was Nicaragua, and as they stepped foot in Managua for the first time they hardly suspected that their trip could help lay the foundation for improving the quality of life for hundreds of Nicaraguans over the next three years.

"I originally became interested in the trip because I never knew until I came to college that Nicaragua is the second most impoverished country in the Western hemisphere," says Seva Khambadkone, one of the student attendees of the trip. "So much was needed so close to home—and I thought I could make an impact."

Khambadkone, now a fourth-year majoring in Molecular Neuroscience, teamed up with fellow Ohio State undergraduates Kathryn Taylor (now a fourth-year in Biology), Pranav Reddy (a fourth-year in Political Science), and recent graduates Sean Boone, Maria Mora, and Viral Patel, at the behest of visiting UCLA student Stanley Park, who was promoting the formation of an OSU chapter of the non-profit organization Project Nicaragua. They coordinated a preliminary trip to shadow Thomas Mauger, MD, an ophthalmologist from Ohio State, who was working to provide eye surgeries to clinic patients at El Centro Nacional de Oftalmología (CENAO).

While on the ground, the group met with directors at the clinic to assess the need in Nicaragua. There, they also met Noemi Caiazzo, a local missionary and founder of the group Amor en Acción ("Love in Action"). It was this meeting that first impressed upon the students that healthcare meant more than just medicine and surgeries.

"By the time we arrived, Noemi had established multiple feeding centers and agricultural and technical training programs through Escuela Tierra Prometida ("School of Promised Land"). Her work was based on a model of bottom-up development, a method by which people empower themselves to sustainably improve the overall

health and welfare of their own communities. This has been the model we have since tried to adopt with the OSU Chapter of Project Nicaragua," explains Khambadkone.

The students returned to Nicaragua in September of 2010, and again in 2011, this time venturing outside of Managua to Rancho Grande, a municipality where Caiazzo suggested they could make an impact. They found the children conducting their lessons on the ground using the few resources they had at hand, and their mothers struggling to bring in a sustainable source of income for their families.

Yet these conditions only fueled their motivation. After conducting numerous studies of the immediate needs and keeping in constant contact with both Noemi and the Student Center at the Escuela Tierra Prometida in between site visits, the students managed to bring 24 computers for the children to use, as well as 700 packets of seeds and over 500 eyeglasses. Since the conception of the Rancho Grande Initiative back in late 2010, they have also managed to fund the construction of a school for the children, have begun implementing a nutritional curriculum, and have established a sewing craft program and bakery to boost local employment.

The students say that these are all sustainable grassroots initiatives that they hope to build upon in the future. Yet this success has been accompanied by challenges.

"As undergraduates, it's difficult for us to obtain access to needed medical supplies," says Pranav Reddy. "And even if we did have access, we still could not find a good way to transport them. Basically, you're dealing with the legal and infrastructural system of a developing country, and that's always a challenge. We usually just bring whatever extra supplies we can in our suitcases."

These challenges, however, have not come

without their share of rewards. At a recent fundraising dinner and silent auction, the students of Project Nicaragua managed to raise \$38,000 in a single night to finish the construction of the school.

What was their secret? "A lot of generous doctors," says Reddy.

"I began crying when I heard the news," says Khambadkone. "We never expected that in one night, we would be able to raise the money needed to build a school for those kids in Rancho Grande."

This initiative, they stress, is certainly not a one-sided effort. "When you're working with community development and public health in another country, community partnership is vital," points out Kathryn Taylor. "Noemi and the Amor en Acción team have been crucial to laying the foundation for what we're doing. It's a combined effort."

The students also stress that it is often the very nature of the challenges themselves that forges the relationships needed to overcome these challenges in the long run. Says Reddy: "It's been an amazing experience, and the consistent strain throughout has been 'empowerment,' both of undergraduates here who seek to confront global health disparities as well as within the rural community of Rancho Grande."

The growing Project Nicaragua team, now entering their third year of operation, is already planning for future initiatives and on-site travel to Rancho Grande. Although they are anxious to move forward, they also take time to reflect on moments in the past that have had the most meaning for them.

"During the last visit, we threw a party for some of the children in Rancho Grande," recalls Khambadkone. "A lot of these kids, particularly the boys, have a serious demeanor when you first meet them

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because they have to help provide for their families—they had a lot of responsibility thrust upon them at an early age. But I remember at this party they finally opened up and laughed for the first time. I realized then that we are all similar. We are all partners in trying to make life better.”

Project Nicaragua at OSU is the third national chapter of the non-profit organization. For more information about the project and to learn about current initiatives, visit the [Project Nicaragua](#) website.



Katie Ferman is an undergraduate student majoring in International Studies and Environmental Policy and Management, and the Coordinator of International Volunteering for the Global Health Initiative at Ohio State.



Events

OSUMC Provides Benefit Dinner

The 2nd annual [OSUMC Provides](#) benefit dinner will be held March 21. OSUMC Provides works to raise awareness of pressing international health issues and to fundraise for sustainable solutions. This year they are collaborating with PODEMOS, a student-led initiative that conducts bi-annual medical missions to El Progreso, Honduras.

When: March 21, 2012, 6:30 PM

Where: The Fawcett Center, 2400 Olentangy River Rd.

Cost: \$60 per person or \$400 for an eight-person table

Keynote: Beth Allen, MD, Pediatric Pulmonologist at Nationwide Children's Hospital

Keynote Topic: Childhood Asthma in Developing Countries

[Questions?](#)

Alleviating Poverty Through Entrepreneurship Summit

The [Alleviating Poverty Through Entrepreneurship Summit](#) seeks to educate, impassion and empower individuals to alleviate poverty through market-based solutions on a local and global scale. The APTE Summit is an entirely student-organized and run undertaking that is free to attend and open to the public.

When: April 21, 2012, 9:00 AM–3:00 PM

Cost: Free

Where: Wexner Center for the Arts

Center Co-Director Receives Distinguished Faculty Award

Health Sciences Center for Global Health Co-Director Mary Ellen Wewers, PhD, MPH, RN, has been awarded the Ohio State President and Provost's Award for Distinguished Faculty Service. She is the first person in the College of Public Health to receive the award. [Learn more and view a video.](#)

SAVE THE DATE: Global Health Day 2012

Global Health Day is May 25. The annual event is held to raise awareness about global health issues and support Ride for World Health (R4WH). Check out the [R4WH](#) website for details. R4WH is also hosting a [Solidarity Ride](#) in Columbus on May 26.

R4WH is a group of medical students, health care professionals, and community representatives who will participate in a 3,700-mile bicycle ride from San Diego, California, to Washington, DC to promote education and awareness of global and domestic health concerns as well as raise funds for Louie's Kids, MANA and SOIL.

Global Health Exhibit

[Against the Odds: Making a Difference in Global Health](#) is a traveling exhibit from the National Library of Medicine that the Medical Heritage Center will be hosting from May 7 to June 16, 2012. The exhibit features stories about the revolution in global health taking place in villages and towns around the world. The exhibit opening will kick off May 17 with guest speaker, Diane Gorgas, MD.

When: May 17, 2012, 4:30 PM reception and 5:00 PM lecture

Where: Medical Heritage Center at the OSU Health Sciences Library

Keynote: Diane Gorgas, MD, Associate Professor and Residency Director, OSU Department of Emergency Medicine

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