

PERU

Creating Sustainable Projects

Monica's eight-year-old eyes peered intently over my shoulder. *¿Duele?* she asked Camilo, whose ruddy fingers I was squeezing to remove blood for an anemia test. *¡No duele!* Camilo reassured her, but Monica did not believe him as she watched the blood flow into a thin glass vial. I was in a classroom surrounded by a sea of seventy-eight school children at a ProPeru health campaign in Calca, Peru. Monica sat down on the chair in front of me and I looked out at a sea of anxious faces. *¿Te gusta bailar?* She laughed. I shook my hands and then hers to mock dance as smiles broke onto the faces of nervous observers. We had just enough materials to perform the test, but collecting the blood was not easy. The blood would at times clot in the vial, or the lancets would not work. Unlike Pediatrics at home, there were no toys or pictures to use to distract the children. Yet scientific medicine remained universal, a powerful method of investigation and treatment.

It was noon. The previously crowded classroom now only held two other volunteers, the lab technician and me. I looked into the microscope and saw a translucent oblong disc. I was looking at blood I had just taken from an underweight six year old. The image I saw looked similar to something I had seen in microbiology lab. It was a parasite, the cause of malnutrition for this little girl. This was common amongst children in local communities and ProPeru carried proper medications to kill common parasites at no cost to the community.

In efforts to prevent the devastating effects of parasites on children I also worked with ProPeru to build an effective and sustainable water filtration system for local Peruvian communities. There is a high incidence of parasites in children

in Peru, and water purification techniques may aid in their eradication. This project collected data about water supply and water borne parasites in relation to the health of the population. This information will be used to analyze the results of the institution of ceramic silver coated water filters.

Inspired by a model from Potters for Peace, this prototype uses mud and materials in local communities to create a cost effective system to filter water. The water filters are made of mud and sawdust in a ratio that provides the pores to be small enough to allow the passage of water but not parasites. After it is placed in the *orno*, or kiln, it might be coated with silver. This combination prevents anything larger than viruses from entering the water supply. My role in this project was to aid



Above Children playing beside a cooler containing vaccines, during a vaccine campaign in Peru.





Above Playing with children during the pediatric campaign.

in the building of the water filters; I sifted sawdust, mixed mud and sawdust, weighed and placed the proper amount into the mold and cranking the machine to make the filter and lugged firewood to burn the filters in the kiln.

The filters were paid for by ProPeru, a non-profit organization based in the U.S. The goal of this organization was to create sustainable projects. ProPeru conducted a study to gauge how much local communities were willing to pay for the construction of these filters. This project is still underway and research still needs to be done in creating the most cost effective and functional water filtration system.

Due to my interest in the Peruvian Healthcare system, I did pediatric work for

the Ministry of Health Clinic in Urubamba, Peru. Patients came into the clinic for general checkups as well as for emergency procedures. High patient numbers and limited resources meant that patients had long waits before receiving medical attention. However, the quality care was excellent. The efficiency with which the Peruvian Pediatrician conveyed information amazed me. She asked mothers about the child's diet and then gave them a chart of what the child should be eating and why those foods were important. After explaining she tested the mothers on the new information. While the mothers answered these questions she filled in any gaps of knowledge and clarified underlying questions.

While working for the ministry of health, I participated in a national campaign against Hepatitis B. I traveled with an Obstetrician and a nurse to homes in distant neighborhoods to collect vaccination histories and provide Hep B vaccinations, as well as free gynecological consultations. At first I felt like a telemarketer intruding upon the sanctity of peoples' homes. Although often distrustful of the government, and perhaps scared of receiving injections, most quickly welcomed us into their homes.

Campaigning to vaccinate everyone in local communities was an impressive effort by the government, with astounding results. We knocked on many doors during our campaign, learning that many people already



Peruvians watching as the vaccination campaign proceeds.

have had the vaccine. Even in hard to reach communities the campaign has been effective. These efforts provide preventive care to thousands of people, using only limited resources and staff. Physicians and healthcare professionals who dedicate their time and resources to bring care to their people make such achievements possible.

Article by Alinea Noronia. More information about ProPeru can be found at www.mypro-world.org/internships/locations_and_highlights/peru.htm and Potters for Peace at www.potters-forpeace.org