



June 1 through June 7, 2016 - Newsletter 2  
**BEGINNING RESEARCH – ADJUSTING TO LIVING ABROAD**

During their first full week abroad, the MHIRT students had similar experiences even though they were in three different countries. They met their international mentors and labmates, worked to gain a better understanding of their research projects, and began acclimating to their surroundings. Early in the week, most students spent time reading the background literature for their projects and late in the week, some students began lab work. Students in Bangkok and New Delhi are learning to deal with the intense heat outside, while those in Cameroon are enjoying Hawaii-kind weather. Food was the topic most often mentioned by the students, with everyone enjoying their new cuisine, except some students found HOT spices used in Thai and Indian cooking are hard on the digestive system. Here are some excerpts from their reports:

## INDIA

**Science:** Tiana wrote, *"This past week was dedicated to reading more material, understanding the project and what each experiment is meant to do before diving into any experiments. I am so thankful that Dr. Tandon is taking his time to give us lectures and reading material, breaking down the project because the subject is very complicated! This coming Monday, John and I will give a PowerPoint presentation to the entire lab. We are very much engaged in scientific conversations, while Dr. Tandon and his students are there to help us every step of the way. The strangest experience is that the functioning lab hours are totally weird! Because it is so hot during the day, it got up to 106 degrees this past week; most lab students arrive at 10-11 AM and will stay until 2-3 AM the next day! John and I watched an RNA extraction at 10 PM and that was so fun, luckily coffee is in abundance here!"* John reported that *"Since neither Tiana or I have practically no immunology knowledge we were given papers about H. pylori infections, macrophage polarization in the setting of HIV, the U1 cell line and various papers concerning co-infections' possible crosstalk and influence on the host immune system. A slow start, but surely to build a solid foundation. Soon we will begin culturing H. pylori for our experiments."*

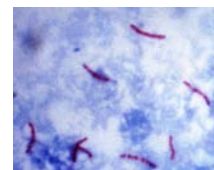


**Culture:** John & Tiana were treated to lunch by the PhD candidates in Dr. Tandon's lab (photo on the left)(Note: both an air conditioner and a fan). Tiana visited a local mall and was surprised to find a security check-point (right photo). She wrote: *"My cultural experience of the week would be all the security checkpoints we have to go through! We have a checkpoint at the entrance of our guesthouse, the school campus, and even the malls! I've never been through a mall TSA before! (I asked permission to take a picture of the security guard)." John wrote, "On what we [have] done culturally is cook Indian food. If you want pictures ask Tiana. She is going shutter crazy while I refuse to take out my phone." "Oh and we joined a yoga class but coming to it is a bit difficult since work times tend to bleed into the class hours. But we'll try our best to attend!"*



## CAMEROON

**Science:** Ernest wrote, *"My first week in Cameroon was fantastic. I was introduced to Centre Pasteur du Cameroon, which is a medical research facility and clinic. I will be conducting most of my work in the mycobacterium unit, which is a national reference laboratory on mycobacterium. I learned three different methods of diagnosing mycobacterium: culturing, microscopy (photo on the right), and PCR. I had hands-on experience on microscopy and was able to successfully read sputum smear slides to identify*

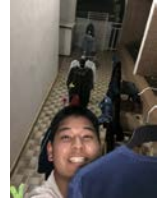


*the severity of mycobacterium infection."* Jessie, who is working at the Institute of Medical Research and the Study of Medicinal Plant (IMPM) comparing nutritional value of Cameroonian and Hawaiian avocados wrote, *"Working with Drs. Tsabang Nole and Gabriel Agbor has been an immeasurable pleasure. They have worked right alongside me, which has been uplifting and inspiring. The patience and genuine desire to help me succeed has been comforting in this period of adjustment. Dr Agbor takes the time to communicate with me, making me feel valued as a team member. I am utmost grateful for his influence in my research here in Cameroon."*

And, Michael F., also at Center Pasteur reported *"Dr. Njouom explained that he would set me up with a technician that will train me in different techniques and show me around the lab. He also gave me a*

couple of papers to read. On Thursday and Friday I was able to get into the lab and practice RNA isolation with HIV and HCV infected plasma.”

**Culture:** MHIRT students attended as special event at the home of a diplomat. **Ernest** reported on the event. “The area was beautifully decorated from the glassware and napkins on the table to the water fountain in the garden. There were many people in suits and ties and traditional clothing. In the beginning we had a Catholic mass, which was conducted in English. The songs were also in English so I was able to sing some notes. Afterwards, we had a huge buffet and dance party.” “We also joined in on a dancing game that they played, where everyone stands in a circle while one person dances in the middle for a minute, and then picks someone else to dance in the middle. Fortunately I had some dancing juice and some kids to teach me some moves, which was displayed that night. I couldn’t tell if I was doing it right, but I got some compliments. This was such a great way to socialize and learn the culture! Way to go, Ernest, but it doesn’t count until we see the video (will try to put the video on our website). **Michael’s** cultural experience this week “I was able to try something that I have never done before, washing clothes by hand. Trying to figure out how many times to rinse and how much soap to use was very challenging. After about 4 hours of rinsing, soaping, wringing out the clothes, and hanging I was finished”



## THAILAND

**Science:** **Tiffany** wrote: “My first week in Thailand has been very exciting and yet exhausting. On Monday we all met with James who took us to meet our mentors.” “I met with Dr. Som who gave me a tour around the facility I will be working in.” She explained what I will be doing in the lab and that I will have 5 first year medical students helping me screen over 100 urine samples. The next day I ... learned that here in Thailand they do not do an undergraduate program, but are students who have just graduated from high school. The students are very young and eager to learn, however do not speak



English well. It will definitely be a challenge to work with the language barrier during these two months, but I am certain with our hard work we will learn a lot from each other. On the other hand, **Michael Meno** said, “This has been a very busy and productive week for me. The lab I’m in is few in numbers, but the people are all very nice. Aek, the PhD student who I’m working with, is very friendly. I feel like I’m spoiled because his English is great and I rarely have problems communicating with him I’ve attached a picture of me with Aek (see photo on the left) after we ate at our welcome dinner! **Jeff:** “On the first day I was given the general

tour of the of the Red Cross and an overview of the many services that they offer like the STI/STD & HIV/AIDS testing, counseling and an Men’s clinic (specifically for MSM).” “Aside from reading literature, I got see some of the sites they used for the various projects that the TRC-ARC oversees.” Finally, **Gabby** informed us that “On the first day of research (5/30), I got acquainted with those in the lab (see right photo) and met Kwang, the lab technician who will be mentoring me and supervising me throughout the course of my project, and P’ Phon. The first half of the day I reviewed my literature regarding techniques used for my project.” “The following day I performed an ELISA ...” and “On Wednesday, I analyzed the results from the ELISA assay and sat in on a presentation about analysis of *B. pseudomallei* using immune-fluorescence assay. The next day I read additional literature about SNP assay and gene polymorphism.”



**Culture:** Members of the group began to learn to speak Thai and had their tired feet cleaned by fish (photo on the right). “For my cultural item, I started to learn Thai because I thought it would be helpful being that my project involves the community and everyone here assumes I’m Thai.” (**Jeff**). “Being in a foreign country really puts into perspective on how important communication is to life. In hopes of breaking this barrier, I learned some basic phrases such as “excuse me”, “how are you”, and “hello” and even learned how to count in Thai for bartering in the street markets.” (**Gabby**). “Culturally, this experience has been great! I’m slowly trying to venture out of my comfort zone to try foods I’ve never seen before. Slowly because my stomach can only handle so much spicy food! I never realized how spicy Thai food can get” (**Meno**). Culturally, the first weekend here in Thailand we tried some Thai food at the famous Siam Paragon mall. It was amazing to see how huge and crowded these malls are, and the food prices are so cheap! (**Tiff**).



See, the students had similar experiences AND food was a key component of their new cultures.

Happy Kamehameha Day everyone!