

## **Tropical Research & Fieldwork (Smithsonian Tropical Research Institute)**

### **Will J's Final Report**

#### **Question Set #1**

##### **1. First Impressions:**

###### **a) What have been your initial impressions of your host organization/work site?**

Very nice group of people that run the lab, including my principal investigator who wants to include me in all the field trips he does for scientific sampling. The lab itself is quite basic, but has everything needed to complete the tasks even though some instruments are older.

###### **b) Provide a brief overview and thoughts about the kind of work you've started doing.**

Molecular biology lab work is not the most intellectually stimulating, but I feel the experience has been valuable and am excited to assist in field collections.

###### **c) How does the work match your expectations; how does it match your goals?**

The work load, at least for the first week is a little less than I expected, mostly because genetics procedures often are slow moving, and I have already taken classes on how to perform most of these tasks so the learning portion took very little time. I do not plan on being a lab technician in the long term but this project will likely make me quite hire-able in labs, which often is a stepping stone to getting into graduate programs.

##### **2. What stood out to you the most regarding your arrival?**

The incredible density and luxury of the large buildings downtown, and the stark wealth disparity between certain areas. The climate was also unbearable for the first few days, after coming from wet, cold Seattle WA to an incredibly hot area.

##### **3. What was your greatest anxiety prior to departing and how do you feel about that now that you have arrived?**

Getting around, and buying things safely was a big concern of mine. However, the numerous small shops, and relatively upscale and tourist-heavy nature of the area I am living and doing work in has made things much easier. The use of Uber and Metro have also helped me get around but I am easily able to walk and from work.

#### **Question Set #2**

##### **1. How are things going at work now that you have settled in for a bit? How does this work align with your professional goals that you set for yourself? Knowing the site as you do now, what would you like to be sure you achieve by the end of your internship?**

They are going much better. More ability to communicate with my supervisors, and increased knowledge of the methods have made the research progress much more quickly. My molecular biology skills have improved, which is great for applying to lab tech jobs between graduation and going into a masters program. I hope to learn as much as I can including interpreting sequence data and managing databases.

##### **2. How are things going relative to your personal goals? In which areas have you made progress and where do you still have some room to expand? What will you do to ensure you are successful personally before you leave?**

Not living in the dorms has provided me an experience to become much more independent. I must do all my own cooking and shopping, all without a car, which can be challenging. However, I have been able to cook enough healthy meals for myself, supplemented by the lunch I get at the labs a few times a week.

**3. How are things going relative to your cross-cultural goals? What cultural experiences have stood out to you so far? What do you want to ensure to experience before you leave?**

Now that I have settled in I continue to try and speak as much Spanish as I can as often as I can which I believe is leading to at least greater comprehension of the language. I want to see much more of the country before I leave so am planning on various tourist attractions and visiting more wilderness areas to better experience the incredible biodiversity and meet like-minded people. Assisting with field collections and snorkeling off islands in the Pacific Ocean has been a highlight, to help break up the monotony of lab work.

**Question Set #3:**

**1. Describe a day in your life:**

- **What is your work schedule like?**
- **What activities and tasks are you doing day-to-day?**
- **What do you do after work?**
- **How do you balance your time between work and exploring life outside of work?**

I usually work from 930-330 give or take an hour, or occasionally longer depending on how much work needs to be done. I primarily do genetics work (extractions, pcr, sequencing, DNA cleaning software) all day from Monday-Friday. About once a week I go and assist in the collecting of urchin specimens either from boats or on foot. After work, I generally walk home which takes about an hour and then go swimming or work out before dinner, then either hang out with roommates or do job/grad school applications. Most of my time during the week is spent at work, but do have a very flexible schedule so it is possible to fit in some other activities during the week like shopping and relaxing by the waterfront.

**2. Housing:**

- **What is your living situation like?**
- **Knowing what you know now, are there other options you would have chosen instead?**
- **If you can provide some resources for future interns, that would be most helpful.**

My housing situation is unconventional (I live with three 30 year olds that work most of the time), but is incredibly convenient being just a five-minute walk to a bus stop that takes me to work or the shopping center. The only downside is not having a cafeteria, like in the dorms, but the location is ideal and is a nicer living situation than most dorms I have seen. That being said there are dorms in the city, but you must apply to them through the visitors office very far in advance (+3 months). I found my room on airbnb which has a lot of affordable options all over the country.

**3. Finances:**

- **How is your budget working out for you?**

- **Are you spending more or less than what you expected?**
- **How much do you typically spend on food, recreation, travel, etc?**
- **What would you do differently knowing what you know now?**

I haven't calculated my total expenses yet but my guess is I'm probably a little bit over my expected expenses. However, my vaccinations were much cheaper than I thought they would be with insurance so that may offset the slightly higher food and recreation expenses to this point, which I figure is ok since this might be the only time I ever visit Panama. I would estimate I am spending about 300 or so a month on food (store trips, buying lunches). The amount I am spending on recreation probably varies by month, but is probably more in the 250 range since most of my recreation opportunities are on the weekends, however this next month I will likely be spending about 400 or so since I am visiting Gamboa and Barro Colorado island and have a four-day weekend during carnival. I think if I were to do something different it would be to spend even more money on recreation since it is a beautiful country, and I am usually cooped up in the lab so it is important to balance that.

#### **4. Travel and Transportation:**

- **How do you typically get around town and to work? Are you satisfied with that choice?**
- **Would you recommend other options?**
- **Do you have time to explore the surrounding area on your time off? How do you manage that?**
- **Where do you recommend exploring?**

I typically walk or take the bus most places that are close to me, like work and the market. Uber is also a good option since it costs roughly the same amount as a taxi but the fare is predetermined, so you don't have to do any bargaining. That being said taxis are everywhere and the prices to get to most places within the city is about \$3. I do have time to explore during the weekends when no one in my lab is working, but this limits excursions to one or two night stays, unless there is a holiday which there are quite a few of in Panama (especially in February). I have only visited a few places but have gotten a lot of recommendations from locals and coworkers. I recommend visiting Barro Colorado or Soberania National Park to experience the rain forest and see many species of animals (including monkeys!). The islands in the Pacific are also beautiful (especially Coiba which is the largest). I am still planning a trip to the Caribbean side of Panama which I hear is incredible, in particular Bocas del Toro and San Blas are worth visiting depending on where you are stationed.

#### **Question Set #4:**

##### **Professional Learning:**

**Describe the workplace culture at your host organization. How does your personal cultural lens work within the culture of your host organization?**

**What parts of your work have you enjoyed the most? Is there any part of your work that you find particularly challenging?**

**Describe a professional accomplishment that you are proud of - be specific.**

The workplace at STRI is serious, and competitive since it is an internationally acclaimed research site. The schedule is very flexible, and the people who work here for the most part

are very helpful and nice. You are expected to put a certain amount of time in to complete your tasks but in my lab, it is up to you when you do this work, however in the beginning of your internship it is very helpful to work at the same time as your supervisors as they can give you guidance. This work culture aligns with mine very closely since I am a serious scientist but don't like to be confined to certain hours or be required to work 8 hour days every day when you don't always have the same amount of work to do every day. I really enjoy going into the field and assisting with collections, but this is a relatively small portion of the work I do. My greatest accomplishment to this point is troubleshooting the amplification process to isolate the co1 gene which can be difficult with invertebrates.

**Cross Cultural Learning:**

**Describe an event where you misunderstood something due to cultural differences. What did you do? What would you do next time?**

I do not believe I have had this experience as of today. But will continue to think about it and maybe it will happen during my last month at the internship site.

**Personal Growth:**

**What are the most important things you have learned about yourself thus far through this experience?**

**What has been the greatest personal challenge? What has been the greatest reward?**

This internship has reaffirmed my passion for nature and conservation through sustainable growth and development. The proximity of the Panama Canal to the incredible biodiversity of the region shows me the resilience of nature, and how active reforestation can benefit wildlife.

The greatest challenge of this internship was living by myself and trying to develop a routine outside of work. This challenge has also been my greatest reward I think because it has given me confidence that I can travel the world and work independently without having to depend on others. However, I believe the greatest reward for me during my internship is working effectively as part of an international research where many people spoke foreign languages. Not only was I able to practice speaking Spanish but was able to understand sometimes complex instructions which gave me confidence in my abilities in learning languages and getting by in foreign countries.

**Question Set #5**

**1. Professional:**

- **Have you learned about any new possibilities for career paths?**
- **Have you done any informational interviews (formal or informal) to learn about the field?**

I have learned more about what working in the field of genetics can offer both in jobs I was aware of and new jobs that people who used to work in my lab have acquired. Working with an amazing lab technician as a research assistant makes me feel more prepared for a job as a technician which is one of the more common jobs for recent graduates looking to be involved in more research. In addition, I spoke with an American who used to run the operations for the Lessios lab, doing both genetics work and data structuring. This pathway led him to be the head data engineer and researcher at the national institute of health in

Washington DC. Talking with him showed me the incredible opportunity I have in this internship and how work with genetics research can open many different career pathways.

## 2. Cross Cultural:

- **Looking back at your pre-departure journal or notes, how have your impressions of the host culture changed?**
- **What is the most frustrating aspect of your host culture? What is the most rewarding aspect?**

The biggest impression of Panama City that has changed for me is its similarity to the U.S. culture wise. It is a very international locale with many Americans and Europeans living in and around the city. The city is full of large supermarkets, malls, and night clubs making it seem very similar to some large cities in the USA. However, when you leave the city to small interior towns or coastal towns there are almost exclusively Panamanian people which gives you a better view of how local people operate.

The most frustrating aspect of Panamas culture is the huge amount of waste, and pollution. Coming from the bubble of Seattle it was amazing to see the amount of litter both on the streets and in the ocean. On top of this there is no recycling or compost programs that exist in the area, and grocery stores use a huge number of plastic bags thus compounding this problem. The most rewarding aspect of Panamanian culture is how nice and compassionate people are that live here, including people that grew up in other places in Latin America and Europe. Which might be considered odd in the USA if someone was not your very close friend.

## 3. Your Culture Curve:

- **The period of cultural adjustment is often represented by a “W” curve with various peaks and valleys: Honeymoon (peak); Initial Culture Shock (valley); Cultural Adjustment (peak); Further Culture Shock (valley); Further Adjustment (peak); Re-entry Shock (valley).**
- **Outline your personal W Curve or cultural adjustments starting from when you arrived in your host country to the present-marking the highs and lows with approximate dates and descriptions of events that represent some of these phases (recognizing of course, that you are still in process of adapting to life back home).**

When I first arrived just after New Years I was very excited, and awestruck to be in such a new place since it was my first trip outside of North America. Everything about Panama was new and I couldn't wait to explore the country and begin work. Within a few days some of the same things that were new and exciting to me became somewhat isolating, the new work environment, the climate, foreign language, and not having a car all made me feel quite isolated and a little bit depressed.

However, within a couple weeks, near the beginning of February, my language skills had begun to improve, and I had settled into my routine at work and occasionally hanging out with my roommates and colleagues made my experience much better. A big part of this was getting comfortable using Uber, taxis, and ferries to take short trips during the weekends to see a little bit more of the country; including Gamboa, Colon, Miraflores locks, and some nearby Pacific islands. Another significant part of this upswing was feeling more confident in the progress I was making at work and connecting more with my coworkers, and my European roommates who I would go out dancing or to parties with in the city.

Recently, between the end of February and beginning of March I have gone into a tiny slump, starting to miss my friends and family having been in a foreign land for over two months makes me feel a little homesick. In addition, the work I am doing is now limited in what projects, and/or tasks I can reasonably start since genetic sequences take a long time so I have a little less to do at work, even though I still have enough to fill up my days.

With three weeks remaining in Panama I foresee one last upswing, both because of my plans for my last weekends, and getting excited to return home. Next weekend I have plans to go to San Blas for a day, and am really starting to cherish my time here in Panama and want to make the most of my remaining time in this beautiful country.

#### **4. Articulating your Experience:**

**Please write one paragraph to sum up your experience, touching on the professional, the cross-cultural and the personal. Discuss your learning, the rewards and maybe challenges of the program. You may think of this as a summary you might give in an interview, or to a fellow student who was asking you about your internship.**

Overall this was a very good internship, with a similar professional culture to the USA. However, to have cross cultural experiences it is important to leave the city periodically and stay with host families, I did this for one night in Gamboa and was a completely different experience culturally than that of the metropolitan Panama City. Connecting with your roommates and going to events with them, or even just going to parties or night clubs to go dancing is very fun and let me connect with people from all over the world that ended up in Panama. The Smithsonian Tropical Research Institute is a great place to work and has incredible staff members, some of whom are local Panamanians. However, since I was not in the dorms it was difficult to connect with other interns in the area, so it would have been nice to have some sort of network in place to connect with other interns in the city. The work was not difficult for me to understand and eventually excel in since I have done a lot of these molecular biology tasks before in classes, but did give me a lot of professional knowledge. I would suggest that if you are doing an internship in Panama to know basic Spanish because it goes a long way to helping you get around the country and have basic conversations with people, because outside of the Smithsonian I would say only 25% of people speak English and the extent to which they can understand it is limited.