Multidisciplinary International Research Training (MIRT) Program

Striving to Eliminate Health Disparities

“Every individual matters. Every individual has a role to play. Every individual makes a difference.” - Jane Goodall

L: MIRT Ethiopia Fellows Idris, Ijala, and Joseph with ACIPH collaborators Hanna and Sami
R: MIRT New Zealand Fellows Beemnet, Wayne, and Gifty

“I can confidently say that I will continue to pursue my passion for global health and increasing access to adequate healthcare among medically underserved populations. I am thankful for this great opportunity and would recommend to anyone wanting to make a difference.” – Wayne Lawrence, Harvard MIRT 2015 New Zealand

“MIRT has solidified my interests in public health and clarified the sort of role I imagine for myself in its field. I come away from this experience with a deeper appreciation for this collaborative discipline as well as with honest friendships in yet another corner of the world.” – Omar Pineda, Harvard MIRT 2015 Peru

“My involvement at Hospital del Trabajador enlightened me in terms of my passion for becoming a researcher and physician dedicated to serving vulnerable and underserved populations. I thoroughly value the importance of public health research, fluency in other languages, and cultural sensitivity in medical practice.” – Samantha Avila, Harvard MIRT 2015 Chile

“My MIRT experience has encouraged me to pursue medicine in the context of public health. My time both in New Zealand and Australia have challenged and inspired me to continue asking questions while keeping an open mind about how we can improve our approaches to healthcare delivery as a global community.” – Beemnet Neway, Harvard MIRT 2015 New Zealand

“This exposure has given me valuable experience that I can share with my classmates and a strong foundation for graduate school. Thank you so much to the Harvard MIRT program for this wonderful opportunity to engage in international public health research and cultural immersion.” – Joseph Okeiga, Harvard MIRT 2015 Ethiopia
**Beemnet’s Post-Trip Reflection**

Beemnet Neway  
Undergraduate, Georgetown U  
MIRT Site: New Zealand

“I’m definitely lost,” I thought to myself as I rode back to my host family’s house. Growing up in a large city, I thought I had Wellington’s transit system figured out. My phone’s GPS fell in and out of signal as I traveled up higher and higher on the hills of Wellington, feeling every turn on the crowded bus. Looking at my watch it was nearly 9:30pm, and I realized I couldn’t see the bus stop signs in the dark. I finally swallowed my pride and moved through the crowded bus to the front and asked the driver where my stop was. To my surprise he responded “I’m not sure where that stop is.” He then asked the whole bus if they knew where the stop was. I was getting nervous because the bus was very crowded, and I didn’t feel too comfortable having the whole bus know where I was getting off. To my surprise, people on the bus were extremely friendly and kind. Several people tried their best to figure out where my stop was, one woman even almost missed her own stop trying to make sure I knew where I was getting off. I was really taken back by the sense of a community an urban city like Wellington has.

As the weeks went on, I began to learn that the community oriented atmosphere translated not only in public spaces but could also been seen in the way healthcare is perceived and delivered.

During our time at Massey University, Dr. Stoner introduced us to some key public health figures working at the Centre for Public Health. I was able to learn about nationwide initiatives such Healthy Families NZ, where local communities are designing custom programs to promote healthy living in workplaces, schools, and public recreational spaces. This integrated approach mirrors the Maori model of health which is structured around not only physical well-being but also incorporates spiritual, mental, and family wellbeing. As our trip progressed, we were able to meet with some amazing Maori community health workers at the Wainuiomata Community Centre who shared with us some of the ways they have been able to overcome cultural barriers that prevent Maori people from accessing the healthcare system. The community center works closely with the local “Marae,” which is a traditional meeting place that is used for celebrations, funerals, and other important tribal events. The Marae is crucial for maintaining a sense of belonging for many Maori people and its relationship with the community center makes it more feasible to engage Maori community members in healthy living.

As I reflected on these experiences, I began to realize that effective healthcare policy is one that recognizes that there is no “one size fits all” solution but instead one that allows various forms of healthcare delivery to meet the needs of respective communities. Too often, western medicine loses the community context of health by focusing too heavily on the individual disease. As an aspiring physician, my MIRT experience has encouraged me to pursue medicine in the context of public health. My time both in New Zealand and Australia have challenged and inspired me to continue asking questions while keeping an open mind about how we can improve our approaches to healthcare delivery as a global community.
I am truly going to cherish the moments I have spent working in the lab with Dr. Stoner, his colleagues, and graduate students who opened their spaces and gave their time to make sure we felt at home. I am also extremely grateful for the host family I had who gave me a second home in New Zealand. As Wellington natives, I got a unique perspective of the city through their eyes and how it has changed over the years. Last but not least, I am thankful to my fellow MIRT New Zealand teammates for their friendships throughout this journey!

“So remember my dear Gifty, the words of St Augustine; ‘The world is a book and those who do not travel read only one page.’ I hope you embrace all its pages on this journey. I’m sure in the end, your journey to this side of the world will allow you to discover yourself and to capture a better picture of the pages of your life story.” These prophetic words, uttered to me by the wonderful old lady seated next to me on my flight to Wellington, would capture the essence of my time in New Zealand and Australia. My MIRT experience has allowed me to gain a wholesome view of the world and an awareness of my sense of responsibility in it.

Since returning home, I have often been asked “How was your trip, what did you see, and what did you do?” As I ponder over these questions, I am reminded of the words of Benjamin Disraeli; “Like all great travelers, I have seen more than I remember, and remember more than I have seen.” While I may have forgotten some detailed aspects of my trip, I can say with absolute certainty that my journey to New Zealand and Australia was humbling, life-changing and marked by personal growth and awareness.
When I first found out I would be spending the summer in Australia and New Zealand, I was ecstatic because I had always wanted to visit both countries and experience their cultures. Not surprisingly, I fell in love with both countries immediately. However, nothing could have prepared me for the amount of personal growth and level of awareness that this experience would bring and how this experience would define me going forward. In retrospect, this summer has been a journey of self-discovery that has enhanced my perspective on life and given me a renewed sense of purpose to aspire towards a career in public health.

Towards the end of my 30 hour flight to Wellington, I peered down from over 3000 ft from the window of the airplane, and New Zealand seemed to have emerged from out of nowhere in the Pacific Ocean. The spectacular views of the mountains and coasts of the place where I would call home for several weeks set the tone for an unforgettable adventure. The words “Kia Ora, Welcome to New Zealand” greeted me as I took in the marvelous Lord of the Rings sculptures at Wellington airport. At that moment, I realized that I was somewhere special; I was in “middle earth.” I was in New Zealand. Although I had never visited the country prior to this trip, the warmth of my homestay family and everyone I met made it seem more like a homecoming rather than a visit. Before long, I had befriended some locals, “adopted” a friendly dog named Buddy, been invited to a Maori cookout, and even spotted a few penguins on the beach. However, just as I was settling in, it was time for us to go to Australia.

The Australian leg of our trip was in part a course on Global Health and Citizenship. In addition, we studied the connection between the natural environment and health as well as explored the healthcare systems and health disparities that exist in Australia. Australia had both a sense of familiarity and mystery about it. On one hand, there was a familiarity in seeing in person all the tourist sites seen on television and in travel magazines, such as the Sydney Opera House and the Sydney Harbor Bridge. There was also the familiar sense of humanity in the stories we heard from the Aussies we encountered.

Yet there was a sense of mystery about this unfamiliar enchanting land filled with a distinctive culture and unique creatures, and I could not help but embrace the culture and the people.

Our time in Australia gave us an opportunity to explore Sydney, see the Daintree rainforest, camp in the Outback, scuba dive in the Great Barrier Reef, and visit the beautiful Tablelands. In the process, we were able to interact with the Aussies we met. Each person shared a unique perspective on life. Each individual and experience contributed a unique page to my changing perspective on how I view the world. Each encounter that I had was a learning experience that enriched my viewpoint.

One aspect of our trip to Australia was to explore the healthcare systems and health disparities that exist in Australia and New Zealand. In Australia, it was sad and humbling to see first-hand the health disparities that exist among the native Aborigine population who have worse health outcomes and a lower life expectancy than non-Aborigines. Upon visiting two Aboriginal communities, however, we saw that some of these communities were reducing health disparities by tailoring healthcare to the needs of their people. Visiting these communities put human faces to all the numbers and statistics on health disparities that I had read about and gave me hope that as long as we are willing to work on it, we can eliminate health disparities.

Below: The New Zealand research team included MIRT Fellows, graduate student Adam Lucero, and visiting professor Dr. Daniel Credeur
Upon our return to New Zealand, I settled back in with my host family and dove into our research. Falling in love with New Zealand was easy thanks to its warm people and beautiful landscape. I approached each day with a renewed sense of gratitude and a determination to work hard and embrace each interaction as a new learning experience. Under the guidance of our wonderful teaching assistant Oliva Orta, we quickly learned the skills needed to analyze our data sets. Under the mentorship of Dr. Stoner, we contributed to an ongoing project on the measurement of vascular bloodflow. Dr. Stoner also encouraged us to think outside the box and embrace opportunities and challenges that would make us stellar professionals in the future. In addition, we engaged in service learning trips to underprivileged Maori communities and reflected on our experiences during our time abroad. Our visit to a Wainuiomata Community Center, a health center for Maori communities again highlighted health disparities in New Zealand as well. As with the Aborigine, the Maori also have worse health outcomes compared to non-Maori. However, it was again encouraging to see that the Wainuiomata Community Center was working to eliminate health disparities by increasing access to resources for members of their communities. The Maori believe that the health of an individual is tied to the well-being of the community and the well-being of the community is tied to the health of its individuals.

I really enjoyed embracing both Australian and New Zealand cultures while sharing my own. I found Maori to be quite similar to my own. Both Maori and Aborigine culture emphasize the importance of family and community, a concept that resonates with me due to my African background. More importantly, both communities are using the concept of family and community to tackle health disparities; an approach that I believe would work in this country as well.

Exploring the sights, sounds and taste of New Zealand was yet another highlight of my trip. The picturesque landscape was yet another reminder that we need to protect and preserve the natural environment. I am incredibly grateful to have had this experience that has helped enlighten my worldview and made me conscious about the challenges involved in delivering healthcare to all. I have come to learn that once you have seen the world from another perspective, you truly become enlightened and you cannot help but be alarmed by its flaws and inspired by its potential.

Top: MIRT 2015 New Zealand Fellows
Bottom: Wellington, NZ (photo credit Wayne Lawrence)
Wayne Lawrence
Graduate, Georgia Southern University
MIRT Site: **New Zealand**

“Wow I’m in New Zealand”, was what I said to myself every morning on my way to work, while admiring the landscape. My MIRT experience was a journey that helped me grow academically, professionally, but most importantly personally. As I reflect back on my experience, I cannot believe all that I accomplished in a little over two months. Most importantly, the extraordinary people I met along the way.

I was fortunate to have gained first-hand experience researching health disparities and chronic disease among medically underserved and underrepresented populations in New Zealand. Working under researchers and scholars provided me with a greater knowledge of public health and allowed me to apply what I learned in the classroom to the real world. For instance, we had opportunities to use statistical software to analyze collected data, collaborate with researchers to develop a publishable manuscript, and present our research findings to the public.

While I truly enjoyed the research aspect of my fellowship, the most memorable experience was going into the community to interact with the indigenous people. This allowed me to learn about their history, culture, and lifestyle, but what had the greatest impact on me was hearing their personal accounts of the inequalities they experience and the lack of access to adequate healthcare within their community. Hearing their stories was a memorable experience, because previously I have read about health disparities within this population, but hearing each person’s story and how it impacted their health outcome and quality of life was a moment I would never forget and solidified my passion for public health.

New Zealand is a welcoming country, where instead of experiencing cultural challenges, I felt at home immediately. I truly enjoyed my journey to New Zealand. Having the opportunity to explore the country, address public health issues, and develop a close bond with colleagues and professors was more than I ever expected prior to the trip. I left New Zealand having gained confidence in myself and the ability to make a positive difference. **I can confidently say that I will continue to pursue my passion for global health and increasing access to adequate healthcare among medically underserved populations. I am thankful for this great opportunity and would recommend to anyone wanting to make a difference.**
“To leave more behind than what I take” is a goal that I failed miserably to achieve during my time in Chile. I can only hope I was able to leave behind at least a small positive impact for the country that has given me so much in such a short period of time. I will never forget its charm, beauty, and for stealing my heart in an unexpected way. As I reflect back on my summer in this beautiful country, the harder it is to find put it all into words, but I will try my best.

The hands on research experience that I was able to have through this fellowship was incredible. I learned how to go about planning and executing a successful and impactful public health research project. In addition, I was able to shadow and learn about the Chilean health care system. The combination of knowledge in these two areas further confirmed my future career plan to pursue an MD/MPH dual degree.

In addition, I was also challenged on a personal level by being in a different country. I had many opportunities to step out of my comfort zone. In the end, this made it possible for me to grow personally and have a deeper understanding of not only Chilean culture, but also the people and culture of our own country here in the United States.

I hope one day to return to South America to work as a medical doctor and a public health researcher. This fellowship definitely prepared me by giving me the opportunity to experience international research in the most authentic way. I am extremely grateful, and I would like to thank Harvard, my mentors, Hospital de Trabajador, and my research partner for giving this amazing and unforgettable experience.

“Ask what makes you come alive and go do it. Because what the world needs is people who have come alive.” - Howard Thurman
While brief, my exposure to public health research in Chile was humbling and inexhaustibly inspiring. I am grateful for the support and guidance of my MIRT mentors and fellows in the beginning, developing, and final stages of my epidemiological study on the association of migraine and childhood abuse among pregnant Peruvian women. In addition, my contribution to helping start Dr. Vélez’s observational study on vitamin D levels in Chilean patients with traumatic spinal cord injury was perfect for allowing me to see the process of proposing and initiating new research. It was truly a unique opportunity to work with a large dataset in my first experience of using SPSS and analyzing the results. I improved my scientific writing skills and applied my fluency in Spanish to translating and shadowing Dr. Vélez in rehabilitation and plastic surgery departments. My exposure to patients at Hospital del Trabajador broadened my perspectives on the role of one’s culture on health, recovery, and the prevention of future illness.

In addition to shadowing Dr. Vélez, I was able to shadow an occupational therapist and learn various aspects pertaining to the roles, goals, and differences between occupational and physical therapy. In our discussion, I was most intrigued by this physical therapist’s biopsychosocial approach to rehabilitation. With the biopsychosocial model, physical therapists consider the biological, psychological, and societal factors that contribute to a patient’s capacity for a safe recovery and return to work. At this hospital, each patient’s physical and emotional health is individually assessed and a plan is tailored to maximize recovery, minimize the likelihood of complications, and encourage personal independence. One major goal in occupational therapy is to provide patients the resources and guidance for gaining skills that may be used in daily life and the workforce. By applying the biopsychosocial model to occupational therapy, the care patients receive is more holistic, process-driven, and considers how societal factors may affect one’s path to recovery. I found the collaborative effort of patients, physicians, psychologists, nurses, staff, and physical and occupational therapists inspiring and effective for ensuring proper medical care.

My involvement at Hospital del Trabajador enlightened me in terms of my passion for becoming a researcher and physician dedicated to serving vulnerable and underserved populations. I thoroughly value the importance of public health research, fluency in other languages, and cultural sensitivity in medical practice. Through my time spent with my host family and opportunities to explore Santiago, Valparaíso, and San Pedro de Atacama, I have embraced Chilean culture. I believe that these experiences of cultural exchange contribute to my belief that among other factors, age, disability, geography, citizenship status, gender, sexuality, and socioeconomic status should never limit one’s right to adequate health care.

Looking forward from this experience and post-graduation, I feel more confident in the intent of my future career goals. In the future, I envision becoming a physician and epidemiologist whose main endeavor is to serve at-risk groups and promote preventative healthcare. Through epidemiologic research, I hope to propose solutions that promote for preventative medicine.
Found in the Atacama desert, the driest in the world, Valle de la Luna (Moon Valley) is renowned for its resemblance to the moon’s surface. The various salt formations and stratifications arose from thousands of years of strong winds and the absence of humidity. (photo credit Samantha Avila)

Samantha explores local Chilean art in Santiago. Special dyes and alpaca wool were used to create the images.

Prior to traveling to Ethiopia, I didn’t know what to expect. Being in a foreign country thousand miles away from my family for two months was a terrifying thought. I’ve never traveled outside of the U.S. without my parent’s guidance and also haven’t been away from home for more than one month. My expectations prior to arriving in Ethiopia were based off uncertainty. I didn’t know if I would be able to speak Amharic, eat traditional Ethiopian food, or assimilate to the Ethiopian culture. In addition, I wasn’t confident in my ability to conduct my first research project. However, apart from that, I was excited to travel and endure a new chapter of my life.

Having now completed my two-month research fellowship with the Harvard MIRT program in Ethiopia, I’ve learned so much about myself and gained so much from this experience. From this experience, I was able to develop tangible research skills, to learn a lot about the Ethiopian culture, and to grow professionally. I learned a great amount of biostatistics, epidemiology, and data analysis from orientation and was able to develop the necessary skills to become proficient in SPSS.
Joseph’s Post-Trip Reflection cont.

It didn’t take me long to assimilate to the Ethiopian lifestyle. Life in the city was very chaotic but interesting. It took me a couple weeks to navigate through the city using public transportation. I quickly learned that animals and cars share the road and pedestrians do not have the right of way. I enjoyed exploring different areas of the city and interacting with different people. However, the one thing I didn’t enjoy was witnessing the mothers and children who were homeless. It was depressing to witness the amount of women with children laying on the side of the dirty sidewalks begging for money; what was even more heartbreaking was being told not to give them any money.

I enjoyed the simplicity of life in Ethiopia. Because I didn’t have a working phone during my stay in Ethiopia, I was forced to learn new ways to consume my time such as reading, watching movies, and exercising almost every day. These new habits helped me personally develop into a more productive person.

The highlight of my stay in Ethiopia was volunteering with AHOPE. My time at AHOPE was filled with lots of fun, joy, and laughter. Within one week, I played numerous games with kids, taught a health workshop, and learned more words in Amharic. The kids of AHOPE taught me how to cherish life and be grateful with everything I have. My perspective of life dramatically changed after spending a whole week with the children of AHOPE.

Overall, I had an experience of a lifetime in Ethiopia. The MIRT program has reinforced my interest in public health; I strive to become a health researcher and administrator and work to positively impact communities globally. This exposure has given me valuable experience that I can share with my classmates and a strong foundation for graduate school. Thank you so much to the Harvard School of Public Health MIRT program for this wonderful opportunity to engage in international public health research and cultural immersion.

"Every individual matters. Every individual has a role to play. Every individual makes a difference." - Jane Goodall

Ijala’s Post-Trip Reflection

I have been back in the states for a couple of weeks now, and I must say I really miss being in Ethiopia. The two months that I have spent there flew right by. I had such an amazing time this summer; one that I will never forget. Having the opportunity to travel to another country and interact with such amazing professionals, researchers, and individuals while conducting public health research was an experience of a lifetime. I can say that I have learned so much about a vast array of disciplines; including fields of public health, global health, research, and medicine.

Looking back, I realized that I have grown so much both academically and personally. I previously had no research experience before this program. I was quite nervous in the beginning stages about working on a project semi-individually, using SPSS to analyze the data of my assigned project, and presenting in front of an audience of experienced researchers. I also wasn’t too confident in my ability to compose a scientific paper. The biggest challenge I have faced was overcoming my fears and lack of confidence in myself, which is something that I have been trying to improve for some time.

Through the MIRT program and assistance of my mentors Dr. Gelaye and Hanna, I now feel more confident in my ability to conduct public health research, give an oral presentation, compose a scientific paper and work individually.
Participating in this program has exceeded my expectations. I had the opportunity to visit places and interact with individuals in ways that would have never imagined. I enjoyed and learned so much from the research component of the program. I can equally say the same for the cultural immersion component as well. The cultural trip to the northern historic sites of Lalibella, Axum, and Gondar was an amazing experience. Being in the presence and seeing such great historic monuments with my own eyes was an indescribable experience. It was fascinating to learn about the significance of these ancient cities and how those marvelous structures were built by hand with simple tools in so little time. We also had the chance to visit hospitals, health centers, and health posts in the cities of Addis Ababa and Hawassa. It was great learning about and seeing many aspects of the Ethiopian healthcare system, both from an urban and rural perspective.

The biggest highlight of my time spent in Ethiopia was the week we spent at AHOPE Ethiopia; an orphanage for HIV positive children. The children are so lively and outgoing despite their condition. While we were there, we taught them how to play many American games we played as children. We also gave a presentation on HIV/AIDS and Health. It’s surprising to see how much these kids know about the disease at such a young age. They looked forward to us being there every day of that week. I still can remember the day the kids scream my Ethiopian name “Injera” as I entered the facility on the last Friday. I formed a bond with both the children and volunteers we met there. I hope one day in the future I can go back and check in on them. From this experience, I have now gained a better perspective of the world we live in. Ethiopia has made me see that the world is a much bigger/complex place. Although I cannot yet pinpoint exactly what I would like to do with my career in medicine/public health, one thing I know for sure is that I want to have an impact on healthcare on a domestic and international level. Ethiopia has given me so much more than I could ever give back. I am immensely grateful and forever thankful for this experience provided by the Harvard T.H. Chan School of Public Health MIRT Program.
Idris’ Post-Trip Reflection

A little over two months ago as I prepared to leave my family and friends to come to Ethiopia, I was ecstatic about traveling to another country. Since the first time I arrived in Ethiopia, I knew I would have the best summer experience. It was not a vacation, but a learning experience which began before I entered the country.

In the first few weeks of being in Ethiopia, I delved into my research – paper critique, data entry, and analysis. I also had the opportunity to visit two hospitals and three malaria surveillance health centers. These visits provided insights on the efforts of governments, health administrators, and healthcare workers in finding solutions to alleviate health problems and crisis.

One of the significantly importance parts of the program is that it allows fellows to experience the richness of the diverse cultures and traditions of the Ethiopians – the merit of which provides fellows with a sense of belonging (in the culture). Despite the language barrier, which limited my expression and interaction with many people, Ethiopians are great hosts.

In Lalibela and Gondar, we were invited to participate in traditional dance and coffee ceremony respectively.

I also had the privilege to volunteer at AHOPE Ethiopia. AHOPE Ethiopia is an orphanage for HIV-positive children that is dedicated to providing a supportive and caring home for vulnerable HIV-positive children. At AHOPE, the other fellows and I worked together to educate the kids about personal hygiene. We also involved them with interactive games and workshops on the immune system and how it helps to defend the body. I was nervous before this event, even though I have been tutoring middle and high school students for two years. By the end of short stay with the kids, I became friends with many of them, and we spend most of our free time playing foosball. This experience was one of the most gratifying experiences of my MIRT fellowship.
Diana’s Post-Trip Reflection

Diana Chaves
Undergraduate, Holy Cross
MIRT Site: Peru

In these past two months, Peru stole my heart. I cannot be more grateful for having the opportunity to participate in the Harvard MIRT program in Lima, Peru. In such a short period of time I was presented with sights and opportunities that truly allowed me to grow as an individual, both personally and academically. I can honestly say I had one of the best experiences of my life, in which I was able to learn more about myself than I have ever had. I will never forget these two months and will view this experience as a start to my future career.

Having traveled to Colombia various times, I went to Lima with the expectations of it being a similar city and culture to the one I was used to. Lima was unlike many parts of Bogota, and the Peruvian culture was very different to what I had grown up with. While I spoke Spanish, it often was difficult to understand Peruvians’ way of speaking, specifically their idioms. Yet the differences were a great way to start conversation and truly taught me a lot about interacting with others. Even between Omar and I, we taught each other Colombian and Dominican idioms and words that we both had never heard of.

In terms of the food, Peru outdid itself. From the ceviche, canchitas (fried corn), to the arroz con pollo (rice with chicken), I was never hungry. I was always trying new restaurants and truly came to love all the various flavors.

My favorite part about the Peruvian culture, however, was the hospitality of the people. Starting with Sixto and his family, we were welcomed into their home and friend group as soon as we arrived. Elena and her children made such an effort to show us around Lima, invite us to dinner, and truly welcome us to their beautiful country. We were always helped by strangers when we needed directions or suggestions for tourist spots. You could tell everyone wanted to help and felt extremely proud to have us visit their country. During our visit to La Merced, part of the jungle, we met so many families that were so intrigued about our work and visit in Peru. They truly wanted to get to know us and show us some of the best dishes of the region. The pride of being Peruvian was very contagious, and I truly began to share the love for Peru by the end of my stay.

My personal and academic growth came intertwined. Due to our complete independence, I was able to learn a lot about my personal strengths and weaknesses. I had never had this type of independence where I had to take care of myself in an unknown city. At first it felt daunting to go out without knowing where anything was, however this feeling soon turned into excitement. I wanted to see, eat, and try everything. With the same mindset, Omar and Anne encouraged many of our adventures and added immensely to the fun.

Below: Omar, Diana, and Anne at Machu Picchu
By traveling to Machu Picchu, Cusco, Ica, and La Merced, we truly got to experience all of the beautiful aspects of Peru. This independence supported my confidence and inspired me to make Peru an even more amazing country.

Our manuscript was a perfect opportunity of making Peru a better place for everyone to live in. Working on the manuscript was the most rewarding aspect of my stay, as not only did I get a chance to produce a final version with Omar, but I was able to observe the whole process behind the research. By working on a project with Sixto in which we had to survey obstetric patients at the hospital, I learned immensely about the healthcare system and patient care. I obtained a detailed overview of the amount of work and effort that goes into research, as well as the impact that it can have on a vulnerable population. It was incredible to have the opportunity of working and shadowing such renown and successful doctors.

Overall, the MIRT program exceeded all my expectations and wishes for this summer. I will carry this experience for a lifetime, as I have grown immensely. My travels, and specifically work at the hospital has inspired to continue the path on a career in public health.

This time, it’s going to be hard to leave.

When you find out you are going to be abroad for some amount of time, it feels like you’ve booked a vacation. There’s excitement for new adventures, new places, and new faces. But no one tells you that when you stay there, when you start to get used to the food, the apartment, the daily hustle and bustle, that you might just get used to being there.

No one tells you that you’ll fall in love.

I have had the incredible privilege of spending two months in Lima, Peru and coming to know a country I had been previously introduced to in a completely different way. Maybe it came from working with a different portion of the population.
Maybe from being able to indulge in completely new food fusions (Peruvian sushi and shawarma anyone?) at any time of day. Maybe from becoming completely comfortable with Karla, Echy, Elena, and Dr. Sixto’s family and being treated, protected, and respected as one of their own. There is probably no single aspect of this trip that contributed to this effect, but I do know that I have fallen hopelessly in love with Peru, the culture, the people, the good and the bad, and I know that it will forever be somewhere I can call a home-away-from-home.

But none of this experience can be described without mentioning some pretty fantastic people that made it possible, and this reflection would probably be best utilized to honor them and the memories we have made together. Omar (“Oscar”) and Diana (“Daniela”), I could not have asked to be sent to another country to with two more perfectly weird, sarcastic, passionate, and real people. Just writing those names in quotations makes me laugh thinking of everything behind them. There is always a special bond that forms between roommates, but you guys were much more than that. For two months, we were family—a dysfunctional family—but a family nonetheless. The MIRT program could not have mixed three more different people together, but somehow we managed to navigate those differences and produce some pretty spectacular work relationships. We laughed and cried together, and we solved some pretty important mysteries together. We even bickered and poked at each other like siblings. We were in the trenches of manuscript writing together, we survived the jungle tour, and we summited one of the most sacred mountains in Peru. And I wouldn’t trade a minute of that for the world.

And all of this makes it hard to leave. There is really no sufficient manner of saying goodbye without losing some meaning behind what you are saying goodbye to, and not without that overwhelming sense of nostalgia and surreal aspect of leaving the new normal. So I won’t say goodbye, just see you soon, and wish you all the very best until then. This summer has a special place in my heart, and I hope to make the most of the opportunity and lessons learned in all future endeavors.

As if it wasn’t already clear that my time in Lima’s dry climate has ended, heavy northeastern showers that have left me totally drenched even with my fragile umbrella in tow have just confirmed it. You definitely experience a sort of reverse cultural shock whenever you return from abroad, and this depends just as much on where you were, where you’re returning to, and where you’ve been in the past. For my time in Peru, I now realize just how much we can take for granted here in the US and more personally, the importance of just slowing down every once in a while. While I think that it’s best to go into these types of things with as few expectations as possible, some things I did anticipate included exposure to multiple parts of the public health field and the larger-scale research process. From my time helping out at Dos de Mayo to my contributions towards my research project with Diana, I got that and so much more. What surpassed my expectations was the comparable time allotted towards cultural immersion. Now don’t get me wrong, this is something that depends largely on both personal interests and motivation, but by the end of my time in Peru I felt that I had a much more complete sense of who its people are collectively.
One of the most difficult parts of living abroad is that you fall, often for the first time in your life, into a privileged minority group that immediately sticks out. Unless you purposefully surround yourself among other foreigners, you may encounter completely new people and values which often times stir up internal conflicts. One of the best parts about these interactions is in the opportunity to momentarily abandon yourself—what you know and what you think you know—to listen entirely free of bias and judgement. This isn’t about compromising oneself as much as it is a courteous demonstration of respect. Moreover, while some of my favorite features characteristic of most (if not all) Latin American countries are in their willingness and openness towards outsiders, it’s also important to recognize boundaries. No matter the sort of connection you may feel towards a country, you must acknowledge the transience of your stay and avoid breaching a space that simply does not belong to you. It’s very easy to forget these things, and we often do it without giving it much thought.

Two months may seem like a long time but it sure can fly by you, especially whenever you’re in a new environment. One way in which I maximized my time in Peru was by being assertive about the things I knew I wanted to do, including tourist visits to the Circus or to Cristo del Pacifico. Planning in itself does take some time, but it can mean something as simple as jotting it down on a list so that you remember about it later on. It was also important for me not to postpone things; if you know you want to do something, why not do it now? I learned a lot during my time in Peru, including how to decipher a doctor’s handwriting, and I can now also officially declare that my Spanish music playlist has entered the 21st century, leveling up a couple of generations from Marco Antonio Solis to Plan B.

**MIRT has solidified my interests in public health and clarified the sort of role I imagine for myself in its field. I come away from this experience with a deeper appreciation for this collaborative discipline as well as with honest friendships in yet another corner of the world.**

---

**Omar’s Post-Trip Reflection cont.**

It has been one of my best summer experiences because although it was rigorous on multiple fronts, we were still able to learn about Peru and its people—an awareness essential for attempting to effect any sort of change anywhere. That I have formed bonds with people in Peru means that I now have more of an incentive to return there someday.

**In my future work, I hope to continue learning about other people and their points of views, no matter how different they may be from my own. These interactions, if taken fully advantage of, are at times the most important ones for personal growth as they allow you to reconsider what you know and how you’ve been taught to think. Along these lines, MIRT has reaffirmed my belief in the importance of having multiple interests and in the potential to learn from all encounters. These are all things I hope to never forget.**

I’ll keep whistling Peru’s El Condor Pasa to myself (listen to it, it’s catchy) as I continue on my adventures through the all-encompassing realm of Public Health and the many more to come. Hasta Luego!

---

“It is good to have an end to journey toward; but it is the journey that matters, in the end.” - Ernest Hemingway

---

Omar, Diana, and Anne with Dr. Sixto Sanchez in Lima
In addition to their research and travel experiences, our MIRT students are also exceptional photographers! Below is a sample of the outstanding photos they took during their MIRT summer fellowships in Peru, Chile, and New Zealand.
Every year our MIRT fellows and faculty work on diverse research projects to address the needs of communities of each site. In the Science Corner, we provide synopses of study findings from selected sites. In this issue, we present studies from MIRT 2014. Please visit the MIRT Program website to read the complete list of abstracts.

Objective: Oscillometric pulse wave analysis devices have recently emerged, presenting suitable options for investigating central hemodynamic properties in clinical practice. This study sought to examine whether the between-day reliability of central SBP (cSBP) and systemic arterial wave reflection (augmentation index, AIx) readings exceed the criterion for acceptable reliability or are affected by posture (supine and seated) and fasting state. Methods: Twenty healthy adults (50% female, 27.9 years, 24.2 kg/m²) were tested on six different mornings: 3 days fasted and 3 days nonfasted. On each occasion, participants were tested in supine and seated postures. Oscillometric pressure waveforms were recorded on left upper arm. Results: For cSBP, there was nonsignificant main effect for fasting state (P=0.819) but there was a main effect for posture (P=0.002). Conversely, for AIx, there was nonsignificant main effect for posture (P=0.537) but there was a large main effect for fasting state (P=<0.001). The criterion intraclass correlation coefficient value of 0.75 was exceeded for both variables when participants were assessed under the combined supine-fasted condition. For cSBP, the reliability coefficient was lowest (best) when supine fasted (6.8 mmHg) and greatest (worst) when seated nonfasted (8.6 mmHg). For AIx, the reliability coefficient was lower for the supine (11.4–11.7%) compared with the seated (14.0–15.2%) posture. Conclusion: Findings from this study suggest that oscillometric assessments of central hemodynamic variables exceed the criterion for acceptable reliability and are most reliable when participants are evaluated while supine and fasted. Journal of Hypertension 2015, 33:1588–1593. PubMed PMID: 26136065.

Background: Obstructive sleep apnea (OSA), a common and serious disorder in which breathing repeatedly stops during sleep, is associated with excess weight and obesity. Little is known about the co-occurrence of OSA among pregnant women from low and middle-income countries. Methods: We examined the extent to which maternal prepregnancy overweight or obesity status are associated with high risk for OSA, poor sleep quality, and excessive daytime sleepiness in 1032 pregnant women in Lima, Peru. The Berlin questionnaire was used to identify women at high risk for OSA. The Pittsburgh Sleep Quality Index (PSQI) and Epworth Sleepiness Scale (ESS) were used to examine sleep quality and excessive daytime sleepiness, respectively. Multinomial logistic regression procedures were employed to estimate odds ratios (aOR) and 95 % confidence intervals (CI) adjusted for putative confounding factors. Results: Compared with lean women (<25 kg/m²), overweight women (25–29.9 kg/m²) had 3.69-fold higher odds of high risk for OSA (95 % CI 1.82–7.50). The corresponding aOR for obese women (≥30 kg/m²) was 13.23 (95 % CI: 6.25–28.01). Obese women, as compared with their lean counterparts had a 1.61-fold higher odds of poor sleep quality (95 % CI: 1.00–2.63). Conclusion: Overweight or obese pregnant women have increased odds of sleep disorders, particularly OSA. OSA screening and risk management may be indicated among pregnant women in low and middle income countries, particularly those undergoing rapid epidemiologic transitions characterized by increased prevalence of excessive adult weight gain. BMC Pregnancy and Childbirth 2015, 15:198. PubMed PMID: 26330183.
I completed my fellowship with MIRT during the summer of 1995. Wow…20 years since my fellowship in Zimbabwe. I remember leaving my almost one year old daughter to go to Zimbabwe. I still have an e-mail I had received from her 20 years ago, where by my wife let her have at it on the key board creating a bunch of random letters, yet creating a wonderful memory and feelings twenty years later. My experience with MIRT has as equally left a wonderful after taste that shaped my career in public health. A few weeks upon my return, I enrolled into a Master’s Program in Environmental Health with focus on water and sanitation and environmental laboratory techniques. My passion has always been the provision of safe water to communities. My interest in this field had increased more so after working on a project in Zimbabwe on the delivery of safe water with locally available resources at an affordable price. Our work was published on the Journal of Environmental Health (Mazengia et al. 2002). After earning my Master’s degree, I took a yearlong Emerging Infectious Disease fellowship sponsored by CDC and APHA. I was fortunate enough to work with the Massachusetts State Laboratory Institute. I learned and worked on a number of conventional and advanced molecular techniques to detect various pathogens. My main project was to characterize a number of isolates that had been isolated from patients with Pertussis like symptoms. Our work was published on the Journal of Clinical Microbiology (Mazengia et al. 2000). While in Boston, I obtained my professional Env. Health credential (i.e. RS) from NEHA.

I liked Boston and my job was going to offer me, but my wife didn’t like Boston and the cold weather. I chose to be happier at home instead of work, so we moved back to Seattle. It happened that the King County Environmental Laboratory (previously known as METRO), which supports the microbiological and other laboratory test needs of the local waste water treatment plants and surface waters, was hiring an Environmental Laboratory Scientist and was fortunate enough to be hired. Six years after working for KC-Env. Lab., I started thinking about studying toward my PhD. It may have been Dr. Williams’ continuous probing! A year after I began my PhD, I transferred to KC-Public Health and worked full time as a Health Inspector while completing my PhD in Environmental Health and Epidemiology. My father always told me, “a dog and time come faster than you can call them.” So was the time to complete my studies. In 2013, I completed my PhD study from the University of Washington. My dissertation was on the epidemiology and public health impacts of Salmonella. I had one child when I was with MIRT and now I have four grown children, hence it did take a village for me to complete my study! I am still working for KC Public Health in the Food and Water Program supervising several junior and senior Health Inspectors. My current position allows me to train, mentor, get involved in resolving infectious disease outbreaks resulting from the consumptions or contacts with water, food, and the environment in the community. In addition to work, I am one of the founders and executive leaders of African Association for Food Protection. One of the goals of the association is to improve the provision of safe food and water in Africa through various strategies.

THANK YOU SO MUCH for doing an outstanding job keeping us informed and interested in the ongoing work of MIRT! Thank you for planting the seeds of confidence in me and so many others! Special appreciation to Drs. Williams and Gelaye for their many years of services: training, encouraging, probing and planting seeds of success in hundreds of people!

Photo: Dr. Mazengia and his son Esaac Mazengia
**Alumni Updates**

Do you have an update?  
We want to highlight your professional accomplishments and personal milestones.  
Help us keep you informed and let us know how you’re doing!  
Please contact Lauren Friedman via email (hsphmirt@gmail.com).  
We would love to hear from you!

---

**Striving to Eliminate Health Disparities**

Harvard T. H. Chan School of Public Health  
MIRT Program  
677 Huntington Avenue  
Kresge 501  
Boston, MA 02115  
Phone: (617) 432-2289  
E-mail: hsphmirt@gmail.com

MIRT/MHIRT is a national program designed to encourage students to pursue careers in biomedical and behavioral research. This program provides support for undergraduates and graduate students to receive research training in an international setting. MIRT is funded by the National Institute on Minority Health and Health Disparities (NIMHD). The Harvard T. H. Chan School of Public Health MIRT (formerly the University of Washington MIRT) Program was developed in collaboration with Dillard University, Xavier University, and Western Washington University. The program focuses on population-based health research in developing countries and builds on established linkages with academic institutions in Zimbabwe, Vietnam, Thailand, Republic of Georgia, Peru, New Zealand, Mexico, Malaysia, Ethiopia, Chile and Australia.

Please visit our website! [www.hsphmirt.com](http://www.hsphmirt.com)

Connect with us on LinkedIn! [MIRT Program](https://www.linkedin.com/company/mirt-program)

Follow us on Twitter! [@hsphmirt](https://twitter.com/hsphmirt)