Multidisciplinary International Research Training (MIRT) Program
Striving to Eliminate Health Disparities

“To give anything less than your best is to sacrifice the gift.” — Steve Prefontaine

POST-TRIP REFLECTIONS OF HSPH MIRT 2012 FELLOWS

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HSPH MIRT 2012 fellows get together in Boston prior to their global adventure!

“...Post-trip Reflections of HSPH MIRT 2012 Fellows...”

“The MIRT Program provides an amazing opportunity to broaden relevant skillsets. I have already found the concepts I have learned contributing to my academic work, and know the same will hold true in the future...I feel that I now have a better understanding of how to design a research initiative, and carry it out, to identify what those exact needs are and how they can be addressed.” — Sheial Patel, MIRT 2012 Ethiopia

“I was struck by the compassion and dedication of everyone who worked at the center. They truly believe in the importance of these therapies, and I think that often the patients and their relatives shared this belief. By the end of our time at the center, so did I. After my experiences working with the MIRT Program this summer, I’m even more interested in a career in public health research.” — Sam Translavina, MIRT 2012 Chile

“Yet as heartbreaking as it was to buy candy from children on the streets of rural Peru, the biggest challenge is not dealing with this on an emotional level — it is using my professional career to affect meaningful positive change. This is something I not only hope to do, but definitely plan to do. I am forever grateful to the MIRT Program for allowing me to have this once-in-a-lifetime opportunity.” — Claudia Martinez, MIRT 2012 Peru
When heading back to school, the initial question that every acquaintance asks is how was your summer? I have found it difficult to describe my experience as a MIRT fellow in passing. A few sentences part of a casual conversation do not give all that I experienced in Ethiopia justice. There are so many components that together make up the MIRT Program—a number of areas to explore and grow in. There are the obvious research and culture aspects, but other areas include self-development, interpersonal relationships, and big picture reflecting.

I had many expectations going into this experience, and learned that sometimes it may be better to take those expectations with a grain of salt. It is easy to fall prey to the media’s relentless portrayal of African nations as impoverished, hungry and HIV-stricken lands. While Ethiopia is not without poverty or hunger or disease, it is a nation with a complicated history, rich culture, emerging industries, and constant development. Addis Ababa is a vast capital, one that is growing a strong international presence and producing a highly educated population that is working wholeheartedly to evolve and move its country forward. Ethiopia is a contradiction to the media’s depiction of Africa. From this realization I was reminded of the importance of not making assumptions and of seeking out credible resources. I also expected to gain a much greater understanding of the public health research process and was grateful to see that expectation met.

The MIRT Program provides an amazing opportunity to broaden relevant skillsets. I have already found the concepts I have learned contributing to my academic work, and know the same will hold true in the future. In my career I hope to aid in the empowerment of underserved communities, advocating for the construction of sustainable practices and the set up of health cooperatives that respond to their needs. I feel that I now have a better understanding of how to design a research initiative, and carry it out, to identify what those exact needs are and how they can be addressed. Many of the connections I made between the work I was doing and my future goals were made possible with the guidance of Bizu and Mahlet and I am grateful for their support.

Leaving Ethiopia, I took many great memories with me—of learning various styles of dance and even trying traditional dishes for the first time. My greatest memories, however, are of the genuine and generous people I have had the pleasure of meeting. Those we worked with at the Addis Continental Institute of Public Health went out of their way to provide us with everything we needed to complete our work in a comfortable and productive setting. We met Getaye in Lalibela, who shared with us the history of the Greek Orthodox Church’s presence in Ethiopia while accompanying us on a 13 km hike to a monastery with breathtaking views. At AHOPE we interacted with dedicated social and health workers who were always looking for innovative ways to improve the lives of the innocent and playful HIV positive kids residing there.

Conversations with locals opened my eyes to more than just public health issues, but also national politics, education barriers, and religious implications. These open dialogues resulted in rewarding friendships that I cherish and hope will withstand time and distance. When it came time to return to the United States, I found myself unwilling. While I wish I could have continued to learn from my peers and environment in Addis Ababa, the only option I am left with is to stay active in my discoveries and maybe return to a country and people that I grew to love in the near future. My appreciation for the meaningful and unforgettable experience I had cannot be put into words.
MIRT offered me an experience of a lifetime that as a low income student I would not have been able to experience without the financial support. I am grateful to my mentors Bizu Gelaye and Dr. Mahlet Tadesse for believing in my capacity and guiding me in the process of learning about data analysis as well as to pushing me out of my comfort zone to learn, appreciate, and embrace new experiences that have made me a more mindful and humble person.

I think my biggest challenge abroad was trying to understand the health disparities in Ethiopia in relation to the privilege of health care that many Americans have and that is often taken lightly. Clean water, access to education, and healthcare, although disproportionately distributed in the US, as American we have it all.

Personally, I too recognized the privilege that I never realized to what extent I had. Although, as an immigrant student of color, it is a struggle to overcome barriers that affect the health of people of color in the US, I am fortunate that I can dream of a better future, knowing that if I seek opportunities I will likely find them.

My biggest challenge in Ethiopia was realizing that for most people, in this life having less isn’t a choice. Less is a reality and it was something that I could fondly relate to because it was my reality as well growing up. My experiences growing up and my recent experiences in Ethiopia have shaped my desire to give more to society by becoming a more educated person who uses education as my best tool to work towards improving the world and decreasing health disparities.

I am grateful for having the opportunity to be a MIRT Fellow this past summer and to have had the privilege to work with current and future health leaders. My experience abroad also served as a way to reaffirm my goals of pursuing a master’s in public health along with a medical degree. Specifically, I would like to better understand the issues that marginalized communities face and address health disparities within these communities. I want to work at the intersections between health care, public health, and justice, both globally and domestically.
This trip has proven to be truly life-changing for me. It’s been far different from my expectations and has actually exceeded them immensely. I went to Ethiopia expecting to witness heart-breaking and depressing struggle and poverty. I expected to experience the frustration that often accompanies working in an environment that lacks a strong infrastructure. I expected to "rough it" and experience physical discomfort often. The problem is not that these expectations were wrong (they were sometimes met), it was that these expectations were what I anticipated I would get most out of Ethiopia. In reality they were very minor factors in light of all of the other experiences I had in Ethiopia.

Considering the trip in retrospect, I feel that I’ve come out of this experience with fresh wisdom, both academic and personal. The two most important lessons I’ve learned are:

First, it’s important to always recognize and assess your biases. This is probably one of the most challenging lessons to learn for me, because, as someone who strives to be culturally competent, I never anticipated that I was harboring internal biases.

They were unconscious to me, and only when I found myself surprised by how off my expectations of Ethiopia were from my actual experience, did I recognize my biases. There were several instances that contributed to my learning this lesson. One of the most significant of those instances occurred during our work at Addis Continental Institute of Public Health. Prior to beginning work at ACIPH, I had a number of expectations as to how the work environment at ACIPH would be. From my previous experiences at different work environments in Sudan and South Africa, I thought that the pace of completing assignments would be very slow, that work would be more of a social environment, and that deadlines would be a formality that was not actually followed in practice. I had this "Africa bias" that I had partially gleaned from the very few work experiences I had in Africa (n=2) and from what I’ve heard others say about their experiences of inefficiency in completing projects and jobs in different parts of Africa (i.e. "Africa time"). I generalized the conclusions I made from those primary and secondary observations to the entire continent of Africa, completely disregarding the immensity of diversity that is found there. My pre-conceived ideas were far from reality. All of our co-workers at ACIPH were knowledgeable, organized, and hard-working. They balanced working on numerous projects simultaneously at dozens of sites across Ethiopia. Moreover, on top of original research, they taught numerous students from a number of different universities. The project that took us more than six weeks to complete could have easily be completed in half the time by one of our ACIPH colleagues. I quickly realized what a productive institution ACIPH is, and how much of an honor it was that they allowed us to be a part of their work. After coming to that realization, I was to recognize my "Africa bias" for what it was. That experience has humbly taught me to be careful in making assumptions and believing stereotypes.
Second, never underestimate a nation before you’ve had a chance to get to know it. Not only is it dangerous to do so, it’s also very ignorant. There is one experience in particular that helped me learn this lesson, and it happened on the very first day I arrived in Ethiopia. One member of our host family, Dereje, was kind enough to pick me up from the airport when I first arrived. I was the first to make it to the home where we’d be living for the next two months, so I had a chance to sit and chat with Dereje. We were joined by his rambunctious 6-year-old niece who began asking me all sorts of questions in almost perfect English. I was so surprised to hear her know English so well as such a young age, I shared my surprise and compliment on her speaking abilities with Dereje who responded with a chuckle. At that time I didn’t realize that it was a silly thing to say, but I slowly came to that realization as I interacted with more people in Ethiopia. Most of my interactions in Ethiopia were in English. Though their mother tongue may be Amharic or Tigrigna or one of the many other languages of Ethiopia, many people know how to speak English quite well.

In fact, they often know how to speak 3+ languages quite well which is double my own 1.5 language competency. Thus, it was humbling to realize that I was underestimating Ethiopians by anticipating their ignorance of the English language. I was even more humbled when I recognized my own ignorance of Amharic; throughout my whole trip, Ethiopians would speak to me in English, making it convenient for me even though I was visiting their nation and they really didn’t have any obligation to speak any other language than their mother tongue.

In conclusion, I had a wonderful experience with the MIRT Program. I’ve come back to the States as a more skillful, knowledgeable, and wise woman. The lessons on cultural humility and open-mindedness that I gained as a result of the MIRT Program will be immensely useful in my medical school career as I learn how to provide care to patients that come from a variety of backgrounds and perspectives. The public health research knowledge will also serve useful for the other public health projects I endeavor to join in medical school and perhaps if I pursue a Masters in Public Health. I’m extremely grateful to the MIRT Program for providing me with an experience that would have otherwise not have been possible for me and for all that I have gained as a result of that experience.
Leaving my native country Ethiopia and moving to the United States was a defining moment and quite daunting considering the challenges of adapting to a new culture, new people, different food and environment. However, the opportunity to return to Ethiopia with the summer 2012 MIRT Program was an even more defining moment. Filled with immense nostalgia, I was not sure of what to expect. I embraced the MIRT fellowship as a unique opportunity to not only advance in my academic prospects but also to reconnect with people, to identify and appreciate their challenges socially, culturally, economically and professionally.

Together with my colleagues Gardenia, Hazar, and Sheila, I was fortunate to visit the main cities of Ethiopia and the countryside. All of our field trips were organized and offered educational and enjoyable surprises. We also had the privilege of visiting some of the rural clinics and health centers crippled with poor facilities, equipment, infrastructure, and severely understaffed. Health care providers in these clinics lacked most of basic resources. Nevertheless their passion and commitment to serve their community was inspiring. It was amazing to see how clinic staff members and health extension workers managed to integrate public health awareness and training in their work to prevent spread of diseases.

Our time in Ethiopia was largely spent at Addis Continental Institute of Public Health. The staff members were friendly and shared some of their experiences at work, their life stories, and beliefs which added to our MIRT experience. Our mentors Dr. Mahlet and Mr. Bizu helped us gain skills in epidemiology and biostatistics. I also gained a better understanding of scientific writing and critiquing scientific papers as we worked through our literature reviews and drafted our MIRT papers.

Working as a volunteer at AHOPE was the most rewarding part of my summer. AHOPE provides support to HIV positive kids, all of whom have lost their parents from HIV AIDS, by giving them hope and purpose to live. During our volunteering period, we played different games with the kids, gave simple lectures, thought English classes and created a bond with the kids. We also made presentations about personal hygiene, healthy eating, staying healthy, and sexual health education for older kids. *This experience gave me a deeper understanding of how useful small contributions can be in changing the lives of many. It also showed me how discovery in science and technology, such as the antiretroviral therapy (ART) can save so many lives.*

I have to acknowledge that I gained great experience in my MIRT fellowship in Ethiopia. MIRT has helped me to improve and develop both my personal and career goals. I was able to build a long lasting relationship with my mentors and fellow classmates. My mentors’ support, encouragement and personal lectures, have enabled me to conduct a biostatics analyses comfortably. Although I am still at a crossroads on what to major on as my future goal, whichever career I will go into will involve working with a non-governmental organization. I greatly appreciate the opportunities that the MIRT Program offered me. It is my hope that I will use my new skills and experiences to be helpful in making a difference, especially in my native country Ethiopia and the world as a whole.
My overall experience was so much more than I had imagined. The two months I spent in Punta Arenas were full of Chilean customs and traditions, research, clinical therapies, and travel excursions. I am so impressed with how well prepared we were for the program and all of the support we received while we were in Punta Arenas. I did not expect to assist with therapies every day nor did I think I would have the opportunity to shadow Dr. Barbosa and Dr. Veléz. Both made my experience as a MIRT fellow unique because not only was I exposed to the research side of public health but also how it is incorporated in a health clinic.

This past summer helped me confirm that Public Health is one of my passions and something that I would like to pursue in a graduate program. I am amazed at how el Centro de Rehabilitación caters to all of the children with special needs in the Magallanes region. Everyone who works there truly cares about their patients and has formed friendships with each other and the families that seek their help. I can definitely see myself working in a similar setting practicing medicine augmenting it with Public Health research.

There were not too many cultural challenges that I had to face because every Chilean, including our host family, was so kind and welcoming.

The most difficult part was adjusting to the winter weather as well as the lack of sunlight! To make up for that, Sam and I would go to the gym every day which was also another way we met more people and to help us stay healthy! The biggest challenge in general was probably being away from my family during our summer since that is when I normally spend the most time with them during the year. Luckily, I was able to be with them all of June!

To make the most of my time abroad with MIRT, I never took one day for granted. I spoke to every specialist at the clinic to learn about what they do. I worked diligently on our research project and SPSS analyses. I tried all different types of Chilean meals and learned various Chilenismos. I spent time with my host family and traveled often with Sam. We even crossed the border into Argentina for a weekend where we went snowboarding for the first time and dog sledding! Every day was an adventure and so different. I spent a lot of my time at zumba classes and at Chocolatta Café and always made an effort to meet new people.

His experience was unlike any other. The most rewarding part was being able to see our finished product, our research paper, at the end. Sam and I, along with Dr. Barbosa, Dr. Veléz, Bizu, Adaeze, and Dr. Fitzpatrick, worked so hard during these two months. It was truly incredible to finally be able to present our results at the clinic and send in our final draft to hopefully be published in a research journal. I made everlasting friendships with our mentors, our host family, and our co-workers at the clinic. I will never forget how kind the Magallanes people were and how hard it was to leave. I hope to return one day to Punta Arenas and help out at the clinic again. I know that they will continue to do great things for the people of Patagonia.
What’s the one thing everyone thinks about, when they think about Patagonia? In my experience, it’s penguins. In the months prior to our arrival in Punta Arenas, friends and family asked me many questions—“Is it cold there?” (Yes) “Will you get to Antarctica?” (No). The most frequent question I received, however, was “Will you see penguins?”

My response—“I hope so!”—reflects all the things that I didn’t know about Punta Arenas before this summer. Although June, July and August are summer months in the Northern Hemisphere, in Chile they’re the heart of winter, a time when the penguins in Patagonia migrate to Brazil. I failed to catch this detail in all of the guidebooks, newspapers and Wikipedia articles that I pored over before our trip. Actually none of these sources, though filled with facts about Punta Arenas, could capture the amazing community we found there. My family is Chilean, so I’m somewhat used to Chilean food, music and history. But somewhere between attending a motocross race and eating my first king crab empanada, I realized that Punta Arenas was a far cry from the extremely urban areas of Chile that I had been accustomed to.

That’s not to say it’s not a city; it has about 120,000 inhabitants and a burgeoning downtown. However Punta Arenas is also small enough that everyone seems to know each other and residents can’t seem walk through the mall without running into at least five friends or relatives.

I was surprised at how hard it was for me at first, as a bumbling gringa entering this very insulated community. I felt as if I was continuously doing embarrassing things—ranging from making grammatical errors in Spanish to spectacularly falling off a treadmill at the gym. Despite these minor kerfuffles, everyone I encountered in Punta Arenas was incredibly warm and welcoming. Our host family treated us like one of their own, and Dr. Velez and his wife, Dr. Barbosa, were always available to offer advice or answer our questions. It wasn’t long before we, too, started to run into people we knew at the mall, and I began to feel at home.

Meanwhile, at work, we were learning more than I could’ve imagined. Over the course of 2 weeks, Dr. Fitzpatrick gave us a crash course in public health research and answered many of the innumerable questions I had about the field. Additionally, I found that observing and assisting with therapies to be a deeply inspiring experience. These workshops could be challenging for me, as I felt self-conscious about my lack of clinical knowledge and language skills. However I was struck by the compassion and dedication of everyone who worked at the center. They truly believe in the importance of these therapies, and I think that often the patients and their relatives shared this belief. By the end of our time at the center, so did I.

After my experiences working with the MIRT Program this summer, I’m even more interested in a career in public health research.

“It is not our job to finish the work, but we are not free to walk away from it.”—The Torah
All in all, I think that this summer taught me to keep an open mind and a willingness to learn and experience new things. By far the best part of our trip outside of research and the center was traveling around Patagonia. We saw some of the most beautiful places on earth and formed stories that I’ll remember for the rest of my life. This is most easily exemplified for me by our trip to the southernmost city in the world, Ushuasia, Argentina. Aline, my fellow MIRT fellow, suggested that we go snowboarding. As my fall from the treadmill may suggest, I am not a particularly coordinated person. Still, I decided to give snowboarding a shot. The first half of the day mostly consisted of me falling down hills and running into fences. I kept trying though, and by the end of the late afternoon, had successfully learned how to snowboard (very slowly). The mountains were beautiful that day, and Aline and I ended up being the very last people on the slopes.

Quotes of the Month

“Our greatest glory is not in never falling, but rising every time we fall.”—Confucius
“Institutions will try to preserve the problem to which they are the solution.”—Clay Shirky
“The reputation of a thousand years may be determined by the conduct of one hour.”—Japanese proverb
“A different world cannot be built by indifferent people.”—Peter Marshal
I have now stood on the edge of a former Incan civilization, and attempted to capture its majesty in a single photograph. I failed in doing this—and for the first time in my life was glad I failed. Some experiences cannot and should not be so easily replicated or so effortlessly captured. I feel this way about many of my experiences in Peru this past summer. Nothing I could say—no matter how eloquently—would do justice to the things I saw, the people I met, or the lessons I learned. I expected to “immerse” myself in a new culture, but had no idea what that entailed. I expected mountains, adventure, and ceviche. I did not expect poverty or awe. In a country where about one third of its population lives below the poverty line, I was not expecting to find such resilience and optimism in its people. It was a bittersweet summer, one of harsh realizations and experiences that restored my faith in the good of humanity.

In my entire two-month period in Peru, the most important thing I did was observe. I did the kind of observing that requires one to be comfortable with silence; the kind of seeing that is not merely looking, but allowing the sights to penetrate your mind and remain there for as long as it takes you to process them in their entirety.

And there was indeed a lot to process. I took 16-hour bus rides through rural Peru, rowed down the Amazon River in search of pink dolphins, ate enough ceviche in one sitting to feed a small army, burned those calories by spending an entire day hiking a mountain to reach a hidden waterfall, napped on a hammock on the edge of the jungle, and stood in awe of the wonder that is Machu Picchu.

While all of these amazing moments will make Peru one of the most memorable experiences of my life, they were still not the most rewarding aspects of my time in this gorgeous country. The most important thing I will take back with me is the realization that even in less-than-optimal situations, people can always find a way to keep their spirit alive. That is exactly what I observed in Peru: people with a vibrant nature and vigor for life that infused everything they did with ardent vitality. The ceaseless zest for life in times of hardship and the persistent desire for advancement is something that will always remain etched in my memory, forever attributed to the beautiful country of Peru and my summer there.

It was (and still is) difficult to cope with the fact that there are people in the world who live in poverty and constant hardship. Yet as heartbreaking as it was to buy candy from children on the streets of rural Peru, the biggest challenge is not dealing with this on an emotional level—it is using my professional career to affect meaningful positive change. This is something I not only hope to do, but definitively plan to do. I am forever grateful to the MIRT Program for allowing me to have this once-in-a-lifetime opportunity.
My summer in Peru was one of the most unforgettable experiences in my life. Firstly, I was constantly challenged to think like an epidemiologist. As a student studying public health, and never having taken epidemiology before, this challenge was most rewarding because it helped prepare me for my future academic and professional careers in public health. Drs. Sixto Sanchez and David Yanez taught me extensively throughout the process. Aside from working on our research, we helped our host Mom Elena with the study on domestic violence at the maternity hospital. Observing how data is collected was a good supplement to my overall research experience.

Traveling to Cusco and Machu Pichu was the highlight of my trip. There was an abundance of culture and history that I was exposed to. The historical significance of the Incas in Cusco and Machu Pichu was evident. The most impressive part of Peruvian culture was their elaborate use of rocks to build their cities and temples. The people, the animals, the pisco, and the culture were my favorite in Peru.

Overall, this will forever be a memorable experience. I am really thankful for the MIRT Program because without it I wouldn’t have been able to go to South America and learn and experience as much as I have. The entire experience was rewarding; no one aspect was more rewarding than the other. I am extremely blessed to have met the people I have met, worked with the people I have worked with, and experienced everything Peru has to offer.
Located in Addis Ababa, AHOPE Ethiopia is an orphanage dedicated to providing a nurturing, caring, and supportive home for vulnerable HIV-positive children. Upon first opening, AHOPE’s major aim was prolonging the HIV-positive children’s longevity. In September of 2005, anti-retroviral medicines first became available to the children at AHOPE thanks to the PEPFAR program which funds anti-retroviral drug therapy (ART) for HIV-positive individuals. While ART is not a cure and the children are still HIV positive, they now have the opportunity to live long and have active lives. Today, AHOPE has progressed from a hospice for HIV positive children to a place that sends them to school, teaches them how to manage their disease, and equips them with skills that prepare them for their futures as healthy and independent citizens.

Volunteering at AHOPE was an experience we had been eagerly looking forward to from the very start of our stay in Ethiopia. The experience promised not only an opportunity to play and have fun with kids but also a chance to make a contribution in a resource-limited setting with a substantial amount of need. Additionally, based on the words of previous MIRT fellows, the children at AHOPE were sure to change our lives. Thus, we walked through the gates that lead into AHOPE’s compound with much excitement as we thought about the inspiration and motivation we hoped to gain from them.

There are three facilities—including Little AHOPE for children under the age of 12, Big AHOPE for adolescents age 12-16, and the Youth Transition Home for those who are ready to leave the orphanage and transition into the community—which nearly a hundred children consider home. They are taken care of by full-time nurses, teachers, and social and childcare workers. We had the amazing opportunity of working with the staff during our final two weeks in Ethiopia. At our initial meeting with Program Deputy Director Mengesha Shibiru, we decided our skills would be best utilized by playing nutrition and hygiene games with the younger kids, discussing sexual health with the older kids, and reviewing proper hygiene procedures regarding childcare and food preparation with the caregivers. This was an exciting opportunity for all of us to research and learn more about these topics specific to group home settings. At first we were nervous that the kids wouldn’t find our presentation useful, but we encountered many questions from the kids and staff that quickly put our uncertainty to rest.

The other half of our service-learning experience involved playing! It was all fun when it came to playing sports, creating crafts, and dancing to various top 40 songs popular in Ethiopia. Running around with kids at AHOPE and seeing their bright smiles brought us so much joy. It seemed almost hard to keep up. Their energy and positivity often made us forget their HIV-positive status, an aspect we often reflected on as a group. Often people equate HIV-positive with being physically weak and incapable, but stopping by AHOPE would make anyone question that mindset. The lessons we learned during our time spent at AHOPE are invaluable, and we are grateful to the amazing staff and kids for opening our eyes to various issues and concerns.

Our experience at AHOPE Ethiopia was truly inspiring and, in a way, served to confirm that public health is something we all hope to integrate into our careers. We encourage you all to visit AHOPE’s website (www.ahopechildren.org) and do all that you can to support the wonderful work that is being accomplished there.
Symposium on Non-Communicable Diseases in Ethiopia

The Harvard School of Public Health Multidisciplinary International Research Training (HSPH MIRT) Program, Addis Continental Institute of Public Health (ACIPH) and International Clinical Laboratories (ICL) hosted a first of its kind non-communicable disease symposium on November 8, 2012 in Addis Ababa, Ethiopia.

The symposium was attended by a diverse group of health professionals, researchers, and professionals from governmental and non-governmental organizations.

Non-communicable diseases (NCDs), in particular cardiovascular diseases, diabetes, cancers, and chronic respiratory diseases, have become the major cause of morbidity and mortality globally. NCDs account for two thirds of all deaths globally, more than double the number of deaths caused by infectious diseases, maternal and prenatal conditions, and nutritional deficiencies combined. Moreover, contrary to common misperception, the burden of NCDs is worst in low- and middle-income countries where 80% of all NCDs occur. In sub-Saharan African countries such as Ethiopia, increased urbanization and changing lifestyle have contributed to the rise in NCDs.

During the symposium, staff members from HSPH MIRT, ACIPH and ICL shared results of collaborative studies that have been conducted among urban dwellers in Ethiopia in the past three years. It was shown that the magnitude of cardiovascular risk factors was high among study participants and obesity was found to be an emerging problem particularly among women. Approximately 20% of participants were found to be hypertensive and 6.5% of them diabetics. In addition, the burden of mental health problems among young adults was particularly high.

Professor Yemane Berhane, Director of ACIPH welcoming participants and opening the workshop.
The guest of honor, Dr. Keseteberhan Admassu (now Minister of Health) discussed the activities that the Ethiopian Federal Ministry of Health are undertaking to strengthen the health workforce at a community level and combat the growing problem of NCDs.

Following the guest of honor, Professor Michelle Williams provided an overview about the growing problems of NCDs and how they have serious implications on economic development in Ethiopia. Dr. Williams highlighted the importance of promoting interventions to reduce and control NCD risk factors. She also discussed the importance of establishing and strengthening national policies and plans for the prevention and control of chronic disease. She noted how public and private partnerships for NCD prevention and control will be critical. Dr. Williams is the Stephen B. Kay Family Professor of Public Health and Chair of the Department of Epidemiology at the Harvard School of Public Health.

The keynote speaker, Professor Srinath Reddy, President of the Public Health Foundation of India, shared insights and best practices for early detection and prevention programs in low and middle income countries. In his remarks, Dr. Reddy noted how the growing burden of NCDs is contributing to loss of productivity, premature deaths and high health care costs. Furthermore, he noted that multi-sectorial and population wide efforts are critical for combating the major determinants of NCDs. Dr. Reddy is the President of World Heart Federation and the first Bernard Lown Visiting Professor of Cardiovascular Health at the Harvard School of Public Health.

Finally, Mr. Alemayehu Bekele, a representative from the Ethiopian Public Health Association discussed the role of advocacy particularly the work that EPHA is doing to address NCDs. Mr. Alemayehu discussed how EPHA uses mass media and billboard messages to increase awareness of NCD prevention efforts.

The workshop included a panel discussion where participants explored options for moving forward with NCD prevention in Ethiopia.
Below we present a list of selected research papers that were presented at the symposium. Please click on the link below the title to read the abstracts.

Prevalence of Metabolic Syndrome among Working Adults in Ethiopia

Comparison of Measures of Adiposity in Identifying Cardiovascular Disease Risk Among Ethiopian Adults

Prevalence of Hypertension and Diabetes among Ethiopian Adults

Hematological Parameters and Metabolic syndrome: Findings From an Occupational Cohort in Ethiopia

Laboratory Reference Values of Complete Blood Count for Apparently Healthy Adults in Ethiopia

Migraine and Psychiatric Comorbidities among Sub-Saharan African Adults

Prevalence and Correlates of Mental Distress among Working Adults in Ethiopia
Every year MIRT fellows and faculty work on diverse research projects that address the needs of the communities of each site. In the Science Corner we provide synopses of study findings from selected sites. In this issue we present two studies from MIRT 2009 in Ethiopia and MIRT 2010 in Australia. Please visit the MIRT Program website to read the complete list of abstracts.

**Intestinal parasitic infection and nutritional status among school children in Angolela, Ethiopia**

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**Key words**

Intestinal parasitic infection • Helminth infection • Schoolchildren • Nutrition • Anthropometric measures

**Summary**

Introduction. Gastrointestinal parasitic infections are most prevalent in populations with low household income, poor handling of personal and environmental sanitation, overcrowding, and limited access to clean water. We conducted this study to estimate the prevalence of parasitic infection and nutritional status, and to evaluate the extent to which the two are associated among schoolchildren in rural Ethiopia.

Methods. This is a cross sectional study of 664 students aged from 6 to 19 years old from Angolela, Ethiopia. Socio-demographic information was collected using a structured questionnaire. Anthropometric measurements were taken at the time of interview. Examinations of faecal samples for helminthic and protozoan parasitic infections were performed. Logistic regression procedures were employed to evaluate the association between stunting, underweightness, and wasting with parasitic infections.

Results. One-third of the participants were found to have a protozoan infection, while 7.1% were found to have a helminthic infection. Approximately 11% of the students were stunted, 19.6% were wasted, and 20.8% were underweight. Severely underweight boys were 8.88-times as likely as boys of adequate weight (odds ratio OR = 3.88, 95% confidence interval CI: 1.12-13.52) to be diagnosed with protozoan infections. Among girls, those who were severely stunted were approximately 12 times (OR = 11.84, 95% CI: 1.72-81.62) as likely to be infected with a helminthic parasite than those who were not. Overall, there was a deficit in normal growth patterns as indicated by lower than average anthropometric measures.

Discussion and conclusions. There is a high prevalence of intestinal parasitic infections. Stunting, wasting, and underweightedness are also prevalent, and showed patterns of associations with intestinal parasitic infections. Efforts should be made to strengthen and expand school and community-based programs that promote inexpensive, though effective, practices to prevent the spread of parasitic diseases. Initiatives aimed at improving the nutritional status of school children are also needed.

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**Research Article**

Migraine-Asthma Comorbidity and Risk of Hypertensive Disorders of Pregnancy

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**Background.** To evaluate the association of migraine and asthma to estimate the risk of hypertensive disorders of pregnancy in relation to maternal comorbid migraine and asthma. Methods. Reproductive age women (N = 3,731) were interviewed during early pregnancy. At the time of interview, we ascertained participants’ migraine and asthma status. From medical records, we collected information to allow the diagnosis of pregnancy-induced hypertension (PIH) and preeclampsia. Odds ratios (ORs) and 95% confidence intervals (CIs) were estimated using logistic regression procedures. Results. After adjusting for confounders, migraineurs had 1.38-fold increased odds of asthma as compared with nonmigraineurs (95% CI 1.09–1.38). The odds of hypertensive disorders of pregnancy were highest among women with comorbid migraine-asthma. The ORs for PIH preeclampsia and the two disorders combined were 2.53 (95% CI 1.39–4.61), 3.53 (95% CI 1.51–8.24), and 2.64 (95% CI 1.56–4.47), respectively, for women with comorbid migraine-asthma as compared with those who had neither disorder. Conclusion. These findings confirm prior reports and extend the literature by documenting particularly high odds of pregnancy-induced hypertension and preeclampsia among women with comorbid migraine-asthma. Increased knowledge about the prevalence and sequelae of comorbidities during pregnancy may lead to improved symptom management and perinatal outcomes.
Thank you for all MIRT 2012 fellows who participated in this year’s photo contest. We present you samples of outstanding photos from MIRT 2012 Ethiopia and Chile. The selection committee members have selected the Chile group as winners. Congratulations! Please contact Mr. Bizu Gelaye to collect your prize.
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