“The key to success is finding a balance in doing what you love. I owe the MIRT program a great deal of gratitude for opening a door to an enriching path that is still in the making.” -E. Roberto Orellana, MIRT 2003 Alumni

“Within the past year, we began Crafting Change Agents... Our program aims to promote cultural understanding between black Americans and South Africans, encourage civic engagement, and empower scholars to pursue leadership positions in their respective communities.” -Isabel Morgan, MIRT 2014 Alumni
MIRT Alumni Spotlight: Crafting Change Agents

Isabel Morgan was an undergraduate student at Mount Holyoke College when she participated in the MIRT Program Ethiopia site in 2014. During her fellowship, she worked with MIRT Fellow Francisco Eguia on a project titled “Sleep Disturbances and Quality of Life in Sub-Saharan African Migraineurs.” This was an important study that examined impacts of both sleep disturbances and other quality of life measures on migraine. (Journal of Headache and Pain 2015. PubMed PMID: 25902831). Isabel is currently completing her masters in public health at Johns Hopkins University.

Isabel Morgan
Graduate Student
Johns Hopkins University
MIRT Fellow 2014

I participated in the Harvard MIRT program in the summer of 2014. Since the program, I have matriculated into a MSPH program at the Johns Hopkins Bloomberg School of Public Health where I study population, family, and reproductive health.

Within the past year, in collaboration with my friend and co-facilitator, Tayler Ulmer, we began Crafting Change Agents, as a means to encourage international travel of black American and 'colored' South African scholars and challenge their perceptions and strategies in their respective activist spaces. The program is designed to provide opportunities for civic participation and leadership development for underrepresented scholars. Our program aims to promote cultural understanding between black Americans and South Africans, encourage civic engagement, and empower scholars to pursue leadership positions in their respective communities.

With the #RhodesMustFall, #BlackLivesMatter, #SayHerName and many other youth-spurred movements challenging the status quo, this is an opportune time to create a network of talented visionaries and passionate youth voices.

Over the course of four months, we were able to select scholars from Spelman and Morehouse Colleges, the Universities of Cape Town and the Western Cape, secure a videographer, coordinate travel, and raise enough funds to support the program. During pre-departure orientation, scholars from the South African and American cohorts discussed issues of race, identity, and civic engagement through digital dialogues and social media platforms. These weekly Skype sessions allowed our scholars to draw parallels in their experiences and provide a global context to their own identities.

During our first trip to Cape Town, South Africa, our scholars had enriching conversations with academics, the U.S. Consul General, a journalist, filmmaker, instructors, school administrators, and scholar activists. Scholars were challenged to question and embrace their identities; to dialogue about the social barriers that hinder progress toward true equity; and to empower one another and promote social justice in their respective fields, including but not limited to law, public health, public diplomacy, and foreign relations. Perhaps, one of the most memorable moments of the exchange was during the Poetry Event/Night of Reflection held at the symbolic District Six Museum. The event attracted over 100 guests and showcased talent from local artists, screened a short film on the effects of displacements in South African flats, and a discussion about privilege and oppression. Our scholars led a dialogue with the audience using a participatory exercise.
MIRT Alumni Spotlight: Crafting Change Agents

They selected 10 people from the audience, and a volunteer was then asked to arrange the individuals by level of privilege in South African society. This kind of exercise promotes genuine discussion about privilege and also allows for an exchange of how relative it can be given differences in lived experiences.

We envision a transnational social justice network of youth scholar-activities that support knowledge sharing of strategies and tactics to advance social justice efforts affecting disadvantaged peoples.

We are excited to announce that this year we will be partnering with the University of Delaware, blending our program structure into an existing summer research program, in which scholars will engage in 10 weeks of intense and directed research. Scholars will also engage in digital dialogues with their South African counterparts about their research, identities, and strategies for civic engagement. In December 2016/January 2017, students will travel to Cape Town to continue building on their comparative research projects and exchange tools for effective and sustainable activism.

We could not have done this work without the scholars themselves, our South African organizational partner, The Institute of Justice and Reconciliation and Eleanor DuPlooy, our guest speakers, and our generous funders.

Crafting Change Agents and RhodesMustFall activists engage in a silent protest at the University of Cape Town.

Discussing lived realities of oppression and privilege during the Poetry Event/Night of Reflection at the District 6 Museum.

American and South African scholars in the Company's Garden following a lively discussion with filmmaker, Kurt Orderson.
Since 2005, the MIRT Program has been honored to receive an endowed scholarship fund from Frances M. Frazier and Margit M. Loser to help support MIRT fellows. The purpose of the Double Eagle Scholarship was to provide assistance to undergraduate students who participate in the MIRT Program (formerly the UW MIRT Program) with a preference for those students who started and completed their K-12 education in Washington state.

Frances Frazier is a South Carolina native who earned a BS in Nursing from the University of Washington (UW) in 1964. Margit Loser, who was born in Tacoma, received her undergraduate degree from Western Washington University. Frances Frazier and Margit Loser retired as Captains from the United State Navy after collectively providing 57 years of active duty service. As their service has taken them to places throughout the world, Frazier and Loser saw firsthand how the effectiveness of a public health system impacts the wellbeing of various communities. They were concerned that the difference between local and global public health is rapidly shrinking, and the need for health-care researchers and providers with a global understanding is increasing. By creating a scholarship for students who are participating in an international public health research and outreach project, Frazier and Loser were able to provide students with an experience that helped them gain a more global perspective.

Although the Double Eagle Scholarship is no longer available at Harvard, we are sincerely grateful for the generous gift from Frances Frazier and Margit Loser over the years. Their generous scholarship has supported and helped provide training for undergraduate students throughout the years. On the next pages, we share updates from three of the four MIRT alumni who were supported by the Double Eagle Scholarship.
Tessa Conception was a MIRT Fellow in Punta Arenas, Chile in 2013, where she contributed to a project titled “Daytime sleepiness, poor sleep quality, eveningness chronotype, and common mental disorders among Chilean college students” (J Am Coll Health 2014).

One month after she arrived home from Punta Arenas, Tessa left the US again for Nepal. She worked with the Acupuncture Relief Project as a clinic assistant and research coordinator in the village of Kogate. Tessa spent four months in rural Nepal working in primary care.

While Tessa was there she had many incredible, life changing experiences, some of which include delivering a baby on a dirt floor, diagnosing three cases of paralytic polio, initiating a district wide WHO polio vaccination campaign, and treating everyday ailments such as colds, TB, aches, and pains that plagued the farmworkers of the village.

When she returned to the United States, Tessa finished her degree in Environmental Health and Global Health at the University of Washington. She graduated in June of 2014, and since then Tess has been working on a type 2 diabetes study called Glycemic Reduction Approaches in Diabetes: A Comparative Effectiveness Study (GRADE). She works at the VA Hospital in a clinical research group. Tessa also sees participants daily to help manage their type 2 diabetes care.

Kailey (Nelson) Urban was a MIRT Fellow in Thailand where she worked on a project titled “Risk of Preterm Delivery and Preeclampsia in Relation to Maternal Physical Activity Levels Before and During Pregnancy” (Asian Biomed 2013).

In the fall of 2008, shortly after completing her MIRT fellowship, Kailey started her MPH in Epidemiology at the University of Washington, and graduated in Spring of 2010.

In the summer of 2010, she started the Center for Disease Control’s Council of State and Territorial Epidemiologist’s 2-year Applied Epidemiology Fellowship Program. Kailey was placed at the Center for Disease Control Quarantine Station at the Minneapolis Airport and the Minnesota Department of Health’s Refugee Health Program.

After completing the fellowship in 2012, Kailey transitioned full-time to the Minnesota Department of Health’s Refugee Health Program, in the Infectious Disease division. She is the program’s Epidemiologist and have been in this role for about 3.5 years. She is also a new mom! Congratulations!
Kaylee Knowles was a MIRT Fellow in Lima, Peru where she worked on a project titled “Waist Circumference, Body Mass Index, and Other Measures of Adiposity in Predicting Cardiovascular Disease Risk Factors among Peruvian Adults” (Int J Hypertens. 2011).

Immediately after completion of the MIRT fellowship in Lima, Peru, Kaylee was selected as an Ambassador for the Foundation for International Medical Relief of Children (FIMRC) in Trujillo, Peru. Following completion of the ambassadorship, Kaylee was hired by FIMRC as an Assistant Field Operations Manager to continue her work. In this role, Kaylee conducted needs assessments, planned, and implemented health education programs in schools, clinics, and community networks in urban and rural communities around Trujillo and Agallpampa, Peru. Upon returning to the US in 2012, Kaylee began working as a Care Coordinator for Sea Mar Community Centers in Seattle, WA. Kaylee collaborated with the medical providers at Seattle Medical Clinic to educate patients with chronic disease regarding secondary prevention, encourage self-management of health conditions using motivational interviewing, and organizing care conferences for complex patients. Kaylee accepted a promotion with Sea Mar CHC in 2015. She is currently working as a Care Manager in Olympia, WA, managing a multidisciplinary team which provides case management to patients identified as high cost, high risk using the Health Home model, as created by the Affordable Care Act.

THANK YOU to Frances M. Frazier and Margit M. Loser. We greatly appreciate all of your generous support over the years!

"No matter what people tell you, words and ideas can change the world” - Robin Williams
Telemetry-derived heart rate variability responses to a physical stressor

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Background: Analysis of heart rate variability (HRV) responses to an orthostatic challenge can be used to investigate autonomic control of heart rate, an index of cardiovascular function. HRV is typically assessed using the electrocardiogram (ECG), which can be impractical for use with large population-based studies. Objective: To assess the validity and reliability of telemetry-derived HRV responses to an orthostatic challenge. Methods: Twenty healthy adults (26 + 5 years, 45% male) were tested on three separate mornings. Following 20-min supine rest, R-R intervals were recorded using a telemetric device during three conditions: BASE, TILT and RECOVERY. ECG was simultaneously used on 1 day for validity comparison. Measures of HRV included the following: standard deviation of normal-to-normal intervals (SDNN), the root-mean-square of successive differences (RMSSD) and the low-frequency (LF) and high-frequency (HF) spectral power. Results: For all parameters, there was excellent agreement between devices for BASE (r = 0.96-0.99), TILT (r = 0.89-1.00) and RECOVERY (r = 0.96-1.00). For the telemetric device, between-day intra-class coefficient values for RMSDD, SDNN and HF were all above the 0.75 criterion for each condition, indicating excellent between-day reliability. For each condition, the reliability coefficient, expressed as a percentage of the mean (RC%), was marginally lower (greater reliability) for RMSDD (RC% 11-13) and SDNN (RC% 10-12) compared to HF (RC% 12-17). However, SDNN did not significantly respond to the orthostatic challenge. Conclusion: Telemetric HRV, particularly RMSDD and HF, can be used to provide a sensitive, valid and reliable assessment of autonomic control of heart rate. Clin Physiol Funct Imaging. 2016. PubMed PMID: 26749070.

Psychometric properties and factor structure of the General Health Questionnaire as a screening tool for anxiety and depressive symptoms in a multi-national study of young adults

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Background: Globally, common psychiatric disorders such as depression and anxiety are among the leading causes of morbidity and mortality. The 12-item General Health Questionnaire (GHQ-12) is a widely used questionnaire for screening or detecting common psychiatric disorders. The purpose of this study was to examine the reliability, construct validity and factor structure of the GHQ-12 in a large sample of African, Asian and South American young adults. Methods: A cross-sectional study was conducted among 9077 undergraduate students from Chile, Ethiopia, Peru and Thailand. Students aged 18–35 years were invited to complete a self-administered questionnaire that collected information about lifestyle, demographics, and GHQ-12. In each country, the construct validity and factorial structures of the GHQ-12 questionnaire were tested through exploratory and confirmatory factor analyses (EFA and CFA). Results: Overall the GHQ-12 items showed good internal consistency across all countries as reflected by the Cronbach’s alpha: Chile (0.86), Ethiopia (0.83), Peru (0.85), and Thailand (0.82). Results from EFA showed that the GHQ-12 had a two-factor solution in Chile, Ethiopia and Thailand, although a three-factor solution was found in Peru. These findings were corroborated by CFA. Indicators of goodness of fit, comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean squared residual, were all in acceptable ranges across study sites. The CFI values for Chile, Ethiopia, Peru and Thailand were 0.964, 0.951, 0.949, and 0.931, respectively. The corresponding RMSEA values were 0.051, 0.050, 0.059, and 0.059. Conclusion: Overall, we documented cross-cultural comparability of the GHQ-12 for assessing common psychiatric disorders such as symptoms of depressive and anxiety disorders among young adults. Al-though the GHQ-12 is typically used as single-factor questionnaire, the results of our EFA and CFA revealed the multi-dimensionality of the scale. Future studies are needed to further evaluate the specific cut points for assessing each component within the multiple factors. Journal of Affective Disorders. 2015. PubMed PMID: 26342172.
Dr. Roberto Orellana was a graduate student at the University of Washington when he participated in the MIRT Program Peru site in 2003. Roberto contributed to a project on risk factors of physical family violence in Lima, Peru.

I went to graduate school in 2002 to be trained in community mental health promotion. Prior to that time, I had worked for several years with homeless populations in Seattle and I planned to go back to that work after school. But the beauty of college is that you never know what new doors (practical or theoretical) will be open for you. In the summer of 2003, I received a MIRT fellowship to Peru. That experience set off a new personal and professional course that is still having an impact on my career to this day. While in Peru in 2003, I was introduced by my mentor, Dr. Sixto Sanchez, and to other scientists in the region. By that time, I had also begun training on the science of HIV and drug abuse prevention. I networked with Peruvian investigators conducting epidemiological research on sexually transmitted infections (STI) throughout Peru. I went back to Peru in 2006 (then in my first year of my PhD program focused on prevention science at the Columbia University School of Social Work), to join a team of HIV scientists working in the Peruvian Amazon. During that time, I collaborated with the Peruvian team to apply for a grant to work with indigenous populations in the Amazon region. We got the grant, and I moved to Peru in 2007 while still in the middle of my PhD program. I spent that year directing a mixed methods study in over 20 indigenous communities throughout the Amazon.

In 2008, I returned to Columbia University to complete my PhD dissertation on the role childhood trauma on HIV risk behaviors among injection drug users in New York City. I graduated in 2009 and got a tenure track position in social work and community health at Portland State University.

“The moment we choose to love we begin to move against domination, against oppression. The moment we choose to love we begin to move towards freedom, to act in ways that liberate ourselves and others.” - bell hooks
For the past six years, I have continued to work with my Peruvian colleagues and have gone back to conduct field research with indigenous populations. In 2011 I expanded my HIV prevention work to Guatemala, where I have been engaged in community-based participatory research with indigenous populations at high risk for HIV and drug abuse. In 2013, I partnered with investigators in the Division of Global Public Health at the University of California San Diego to conduct an epidemiological study of STIs, as well as the social determinants of HIV and drug abuse, among sex workers, migrant, and men who have sex with men (MSM) in the Mexico/Guatemala border region. Currently, we’re preparing a grant to develop and test a combination prevention program for drug involved MSM in Guatemala.

So, I have taken a bit of detour on my plan to go back to community mental health, but my work in global health has prepared me well to address issues at home. Currently, I’m the principal investigator of several domestic grants. One project is funded by the Center for Disease Control and Prevention (CDC) and is evaluating the implementation of a structural intervention for Opioid Prescription Drug Overdose prevention in Oregon. With CDC funding, I’m also leading the implementation of the National HIV Behavioral Surveillance in the Portland-Vancouver metropolitan area. This study conducts ongoing bio-behavioral surveillance among high-risk populations in the United States.

Last year, I was promoted to associate professor with tenure. I worked hard for it, but I really enjoyed the journey. And I also had a life outside of academia! I got married; I have a son, who is now in 6th grade. I coach his soccer team, and I also joined a soccer team. I run a couple of ½ marathons every year and enjoy playing in the outdoors here in the Pacific Northwest. The key to success is finding a balance in doing what you love. I owe the MIRT program a great deal of gratitude for opening a door to an enriching path that is still in the making.

**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 (hsphtmirt@gmail.com).

We would love to hear from you!
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.

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View of the canyons at Valle de la Luna (Moon Valley), Chile at sunset.

(Photo Credit: Samantha Avila, MIRT Fellow 2015)