Multidisciplinary International Research Training (MIRT) Program

Striving to Eliminate Health Disparities

“Real generosity toward the future lies in giving all to the present.”
– Albert Camus

Harvard MIRT Ethiopia Fellows LaQueishia, Bethannie, and Daniel with their new friends at AHOPE in Ethiopia.

“Hard work is extremely rewarding when you have found your vocation so be true to yourself. Good mentors are critical to success and can help you find a professional path that is aligned with your strengths and passion, and that also allow you to grow. Lastly, don’t be afraid to fail because failure is a part of the path to success. Consider it your first attempt in learning.”

-Dr. Cheryl Anderson, Harvard MIRT Alumni
MRT Faculty Visit: Dr. Marta Rondon

Dr. Rondon met with faculty and presented a seminar entitled, “Challenges and opportunities for the integration of mental health into sexual and reproductive health care in Peru.” In her seminar, Dr. Rondon discussed the burden of psychiatric disorders in Peru, where neuropsychiatric disorders account for 29% of the disease burden. She highlighted the current burden of perinatal mental health issues among women, and the accompanying treatment gap which means that 75-85% of the people in need do not have access to mental health services. Dr. Rondon stressed the importance of working to integrate mental health care into all levels of the healthcare system, from individual self care to informational services in the community to integration at all levels of primary care and psychiatric hospital treatments to provide evidence based mental health care to previously underserved populations. The effective integration of mental health services would decrease the stigmatization of receiving care for mental health disorders, improve screening and treatment methods, and improve patient treatment overall. Dr. Rondon highlighted the importance of integration of mental health care in women’s sexual and reproductive care. Since antenatal care represents the first and often only time many women in low and middle income countries engage with the health care system, the antenatal care setting provides a unique opportunity to improve women’s mental health. Despite the challenges, the integration of mental health care and related structural interventions into reproductive care would greatly improve perinatal mental health outcomes.

Thank you Dr. Rondon!

“Great dreams of great dreamers are always transcended” - Abdul Kalam
MIRT Faculty Spotlight

MIRT Alumni Interview: Dr. Cheryl Anderson

Cheryl Anderson was a graduate student at the University of Washington when she participated in a MIRT Fellowship in Dakar, Senegal in 1995. During her MIRT Fellowship, Cheryl worked on a project titled “A Case-Control Study of Cervical Cancer Among Women in Polygamous Marriages in Senegal.” Since her fellowship, Dr. Anderson earned her M.P.H. (1996), M.S. (1997), and Ph.D. (2001) at the University of Washington.

What is your current job?
I am an Associate Professor, at UC San Diego School of Medicine, Department of Family Medicine and Public Health and the Director of the Center of Excellence for Health Promotion and Equity.

How did the MIRT fellowship help you in your career path?
My experience as a MIRT fellow was invaluable. It solidified my desire to conduct research internationally, and gave me the skills and confidence needed to establish effective collaborations. I am currently partnering with colleagues in Bangalore, Bangladesh, Cameroon, India, Malawi, Mozambique, Pakistan, and Peru to study the effects of self-management of blood pressure on hypertension outcomes in low- and middle-income countries. This work is largely influenced by the research methods, practical skills, and emotional intelligence I gained as a MIRT fellow.

Who is your role model?
My parents. And, colleagues who strive to do the right thing -- even when it’s not convenient.

What is your preferred menu?
Fish, seasonal vegetables and fruits.

What in your life are you most proud of and why?
In my personal life, I am incredibly proud of my support system. I have an amazing nuclear and extended family and the best friends anyone can ask for. My success has been largely due to this network. In my professional life, I am proud to have mentored scores of students from diverse and underrepresented backgrounds in establishing their research careers. I consider it an honor and a privilege to have a role in training the next generation of scientists, and I am proud to have received an “Above and Beyond Award” in 2015 and 2016 from the UC San Diego Office of Students with Disabilities.

What is your favorite quote?
The race is not given to the swift nor the strong but the one who endures to the end.

Who was your most influential teacher?
There are two. My childhood music teacher, William Pyfrom, who ensured I had an exceptional musical education and that I could apply common sense to complex problem solving. And, Larry Appel, my primary mentor during my early career. He selflessly and graciously guided, inspired, and created opportunities for me.

What is something most people would be surprised to learn about you?
I started college at 16 years old.

What’s your best advice to students who want to succeed?
When I was growing up my music teacher would say that “the only place where success comes before work is in the dictionary.” Hard work is extremely rewarding when you have found your vocation so be true to yourself. Good mentors are critical to success and can help you find a professional path that is aligned with your strengths and passion, and that also allow you to grow. Lastly, don’t be afraid to fail because failure is a part of the path to success. Consider it your first attempt in learning.
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 two studies from MIRT 2016-2017. Please visit the MIRT Program website to read the complete list of abstracts.

**Background:** Suicide is a leading cause of maternal death globally, and suicide prevalence rates have been shown to be increased in those with migraine. No previous study has examined the association between migraine and suicidal ideation during pregnancy. **Objective:** To examine the association between migraine and suicidal ideation among a cohort of pregnant women. **Methods:** A cross-sectional study was conducted among 3372 pregnant women attending prenatal care clinics in Lima, Peru. Suicidal ideation and depression were assessed using the Patient Health Questionnaire-9 (PHQ-9) scale during early pregnancy. Migraine classification (including migraine and probable migraine) was based on International Classification of Headache Disorders-III beta criteria. Multivariable logistic regression analyses were performed to estimate odds ratios (OR) and 95% confidence intervals (95%CI). **Results:** Suicidal ideation was more common among those with migraine (25.6%) as compared to those with probable migraine (22.1%, P < .001) or non-migraineurs (12.3%, P< .001). After adjusting for confounders, including depression, those with migraine or probable migraine had a 78% increased odds of suicidal ideation (OR 5 1.78; 95% CI: 1.46-2.17), as compared with non-migraineurs. Women with both migraine and depression had a 4.14-fold increased odds of suicidal ideation (OR 5 4.14; 95% CI: 3.17-5.42) compared to those with neither condition. **Conclusion:** Migraine is associated with increased odds of suicidal ideation in pregnant women even when controlling for depression. These findings support the consideration of screening women with comorbid migraine and depression for suicidal behavior during pregnancy.


**Objective:** To evaluate the independent and combined associations of maternal self-reported poor sleep quality and antepartum depression with suicidal ideation during the third trimester. **Methods:** A cross-sectional study was conducted among 1298 pregnant women (between 24 and 28 gestational weeks) attending prenatal clinics in Lima, Peru. Antepartum depression and suicidal ideation were assessed using the Patient Health Questionnaire-9 (PHQ-9). The Pittsburgh Sleep Quality Index (PSQI) questionnaire was used to assess sleep quality. Multivariate logistical regression procedures were used to estimate odds ratios (OR) and 95% confidence intervals (95% CI) after adjusting for putative confounders. **Results:** Approximately, 17% of women were classified as having poor sleep quality (defined using the recommended criteria of PSQI global score of > 5 vs. ≤5). Further, the prevalence of antepartum depression and suicidal ideation were 10.3% and 8.5%, respectively in this cohort. After adjusting for confounders including depression, poor sleep quality was associated with a 2.81-fold increased odds of suicidal ideation (OR=2.81; 95% CI 1.78–4.45). When assessed as a continuous variable, each 1-unit increase in the global PSQI score resulted in a 28% increase in odds for suicidal ideation, even after adjusting for depression (OR=1.28; 95% CI 1.15–1.41). The odds of suicidal ideation was particularly high among depressed women with poor sleep quality (OR=13.56 95% CI 7.53–24.41) as compared with women without either risk factor. **Limitations:** This cross-sectional study utilized self-reported data. Causality cannot be inferred, and results may not be fully generalizable. **Conclusion:** Poor sleep quality, even after adjusting for depression, is associated with antepartum suicidal ideation. Our findings support the need to explore sleep-focused interventions for pregnant women.

Sonya Patel was an undergraduate student at North Carolina State University when she participated in the MIRT Program Ethiopia site in 2008. During her fellowship, she worked with MIRT Fellow Jaimee Marsh on a project titled “Sexual Harassment and Workplace Abuse among College Faculty and Staff in Ethiopia.” (Journal of Occupational Health 2009. PubMed PMID: 19491527). This project has been instrumental in raising awareness around sexual harassment in the Ethiopian diaspora. The Voice of America recently had a program on this topic. Read more [here](#).

Since participating as a fellow in MIRT-Ethiopia in 2008, Dr. Patel-Nguyen has continued to study and travel. After graduating from NC State with a degree in biomedical engineering, she attended medical school at UNC-Chapel Hill. During medical school, she took one year off to help grow a non-profit organization and healthcare registry database for Palestinian children with cleft and other craniofacial anomalies, traveling to the West Bank on numerous occasions. She also traveled to Malawi during medical school for clinical and research work. Dr. Patel-Nguyen graduated medical school in 2014, and is currently a Medicine & Pediatrics (Med-Peds) resident at UNC. She is traveling to India this winter as a Sanders Scholar with Project Hope, as she continues to explore topics in global medicine and public health. She hopes to incorporate global health into her career, as a practitioner and an advocate for health and human rights. Currently, Dr. Patel-Nguyen lives in Durham, North Carolina with her loving husband Jimmy and their very affectionate pup Rufio. They love to eat, dance, travel, and be with family.

"I believe that unarmed truth and unconditional love will have the final word in reality. This is why right, temporarily defeated, is stronger than evil triumphant."
- Martin Luther King, Jr.
MIRT Alumni Spotlight: Thomas McHale

Thomas McHale was a senior undergraduate at Beloit College when he participated in the MIRT Fellowship in the Republic of Georgia in 2006. During his MIRT Fellowship, Thomas worked on the “Iodine Deficiency and Heavy Metal Exposure Surveillance Project.”

For his Master’s research, Tom worked with an interdisciplinary team of students to undertake the first ever demographic and health assessment of Idjwi Island, South Kivu, Democratic Republic of Congo (DRC). Tom conducted individual interviews and focus group discussions (in Kiswahili, Kihavu, and French), and the team was able to provide, in great ethnographic detail, an understanding of the scale and scope of sexual and gender-based violence on Idjwi Island. In recognition of this project, Tom shared the Gareth M. Green Award for student achievement in public health practice at the Harvard School of Public Health.

After graduation, Tom returned to the DRC to examine the challenges of reintegrating demobilized child soldiers in North Kivu, South Kivu, and Ituri Provinces. He then worked as a Project Coordinator at JSI Research & Training Institute, Inc. While at JSI, he worked to provide financial, operations and technical support to public health programs in Russia, Ukraine, Ethiopia, Liberia, Senegal, Turkmenistan and India.

Since 2014, Tom McHale has worked at Physicians for Human Rights as a Program Officer, and now Senior Program Officer, for the Program on Sexual Violence in Conflict Zones. This program includes forensic training and an advocacy initiative that helps forge networks of collaboration among medical, legal, and law enforcement personnel to support prosecutions and accountability for sexual violence and mass crimes in East and Central Africa. At PHR, Tom develops interventions to strengthen the capacity of healthcare, law enforcement, and legal professionals to collect, document, and use of forensic medical evidence of sexual violence.
In addition to their research and travel experiences, our MIRT students are also exceptional photographers! Below is a sample of the outstanding photos taken during their fellowships in Ethiopia, Peru, Chile, and New Zealand.

City of Lalibela (above) Medieval Castle in Gondar, Ethiopia (middle). Hiking in Peru (bottom left and right).

Santiago, Chile after a rainy day (above). New Zealand countryside (middle).
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!

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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