



THINKING LOCALLY, ACTING GLOBALLY

Global Health at the  
University of Vermont

Compiled and Curated by Kate E. Bright  
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# WHAT IS GLOBAL HEALTH?

*The definition* of Global Health is inextricably linked to public health. Which is to say that it addresses the physical and mental health and well-being of communities on a global level. (1)

It is a perspective that encompasses the world and respects the interconnection between countries, communities and people that may be separated by physical geography, differing cultures and languages but find that these obstacles are not as defining as they once were due to increased travel and communication. (2)

The world, as a whole, has become, figuratively, a smaller place.

*The issues* that are faced in Global Health are issues that people, worldwide, have in common due to how quickly disease can spread. Individuals who strive to make a difference in Global Health find themselves

- fighting malnutrition and water pollution
- teaching basic practices in personal hygiene
- helping to create public health infrastructures in developing countries.

They also work towards opening up the pathways of communication by assisting with information and technology. Reliable internet connection allows local doctors and nurses to have the latest medical resources to best treat their patients. (2)

# GLOBAL HEALTH AT UVM

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*Over the past several years*, UVM's Medical Sciences have established relationships with sister medical institutions that span the globe. With the sharing of information, UVM participants work to improve essential health care around the world in a variety of ways like fighting deadly infectious diseases, and making an impact by teaming up with doctors and nurses in other countries. The programs that have been developed see these immersions as an opportunity for reciprocity in knowledge, culture, and understanding. The University of Vermont's programs in global health are diverse, owing to their respective fields of study, each program is unique with the focus of its mission, whether it be women's health, public health education, the prevention of an infectious disease, or clinical care. Some of the places that UVM doctors, nurses, students, and professors have been are Uganda, China, Russia, Vietnam, Liberia, India, Tanzania, the Netherlands, Bangladesh and many more.

Through these endeavors, they strive to learn about health care on a global level while making an impact and improving the health of individuals and communities on a local level.

This exhibit gives a glimpse into the experiences of our many doctors, nurses, students and professors.

# THE EBOLA MISSION: Liberia

*In late 2014*, Dr. Majid Sadigh, Director of UVM's Global Health Program, and Dr. Margaret Tandoh, Trauma Surgeon and Assistant Professor at UVM, spent 7 weeks in Liberia treating Ebola patients with the Global Health Organization, AmeriCares. Their mission was to prevent the spread of the disease by setting up an Ebola Treatment Unit (ETU) in Buchanan, Liberia. Through careful planning and set-up, the team of expatriates from around the world relied implicitly on each other for the success of their mission.

“My survival is contingent upon my colleague beside me, on his/her attention to detail and maintenance of protocol every minute we prepare to both enter and exit a treatment unit” (Sadigh, *The Landscape of Medicine*, November 13, 2014).



Team Buchanan in Liberia, all ex-patriates from U.S, Kenya, Uganda, South Africa, Ukraine and Japan



Dr. Majid Sadigh



Mock Ebola Treatment Unit training with the US military



Dr. Tandoh, trying to get her first patient to smile for the camera

*The Doctors and Nurses* donned Personal Protective Equipment (PPE) to enter the “Hot Zone” in the Treatment Unit. There was a concern of overheating in the equipment due to high temperatures and high humidity. A person could spend no more than 2 hours in PPE treating patients due to these extreme conditions. It said nothing of the emotional toll that was experienced.

“Goggles often become foggy, obscuring vision, and PPE allow for limited dexterity in actions such as placement of intravenous lines in Ebola patients. Such fumbling opposes the unalterable rule-that any needle puncture incident is one too many” (Sadigh, *Special Report: UVM College of Medicine Professors Fighting Ebola in Liberia*, December 17<sup>th</sup>, 2014)



*The spread of disease* is due to lack of resources and absence of a public health infrastructure. As the world has become more accessible with technology and travel, public health in developing countries becomes the concern of all.

“The world has become very small, and a crisis in one part may be coming to you sooner than you think,” Tandoh says. “So it’s very crucial to send help and send help fast if you have the capacity to do so. This kind of epidemic has be controlled and contained immediately, using all possible resources.” (Shapiro, *UVM’s Ebola Fighters: Tales from Liberia*, January 27, 2015



Dr. Tandoh talking with local kids



Ebola Education in Liberia



Dr. Tandoh fully donned in Personal Protective Equipment (PPE)





Doffing the Personal Protective Equipment



Helping Nurse Julia place an IV (training)

*In his journal entries*, Dr. Sadigh reveals a world where there is no reason why one person survives while another does not.

“Patients presenting to the ETU can be grouped into three defined categories. The first include those who are stable and improving or ready to be discharged...The second group includes those who are stable but symptomatic, requiring two to three full minutes to be advised to drink ORS (Oral Rehydration Solution) and to eat...The final group consists of unstable patients, those who are unresponsive, somnolent, drowsy, whose care is directed towards comfort and dignity” (Sadigh, *Ebola in Liberia: Clinical Observations*, December 9, 2014).





ETU Training

*Beyond the ETU*, life continued with a certain semblance of normalcy though the streets were quiet and the children were not in school.

“I admire the resiliency of the West Africans,” says Sadigh. “Despite being at the epicenter of Ebola, their life continues. I learned so much from that nation” (Shapiro, *UVM’s Ebola Fighters: Tales from Liberia*, January 27, 2015).



Street View



ETU Tents



# PUBLIC HEALTH NURSING AROUND THE WORLD: Uganda, Bangladesh, and the Netherlands

*For UVM nursing students*, Public Health is a required course in their curriculum. Often, this requirement is completed by taking a class on campus. However, some nursing students have taken the opportunity to go abroad and learn about public health in other countries, including Uganda, the Netherlands, and Bangladesh.

These students can experience a disjuncture between their values and beliefs on what is “healthy” and the cultural and social norm that they are exposed to in other countries. This experience is called ‘Cognitive Dissonance’. With the assistance of their mentors, nursing students work through these issues by keeping a journal and talking about their experiences.



Children in Kamuli, Uganda



Nursing students in front of the Peace Palace in  
Den Haag, the Netherlands



Building a hand-washing station, Uganda



Village Health Care Worker, Savar, Bangladesh

*Immersing* into a new culture and assisting with health care means learning about what is needed and how to help in the new environment. This help may include:

- Building a hand-washing station
- Feeding children at lunchtime
- Donating money to local charitable organizations

In addition, personal hygiene and the spread of disease are important issues in developing countries like Uganda and Bangladesh. And, although they address similar challenges dealing with language barriers, customs, and culture shock in the Netherlands, nursing students find themselves in more familiar clinical care settings.



*No matter the place,* the UVM public health nursing program continues to stress the importance of communities learning to help themselves and to become sustainable. The following photographs give a glimpse into the world of public health nursing for UVM students visiting Uganda and Bangladesh.



Traditional musicians and dancers carry health messages throughout the district supported by KAPIDA, Kamuli, Uganda



Community 'Health Check-up Day', Uttara, Bangladesh



These senior Ugandan nursing students teach families who care for patients in the hospital as a part of community outreach efforts.





# GLOBAL HEALTH DIARIES: Excerpts



Clinical Camp: Kasansero, Uganda



Sunday afternoon football match

*The Global Health Program* at the UVM College of Medicine has seen much growth in recent years having established new partnerships in existing initiatives. With the goal of improving health care and gaining experience and understanding, students are encouraged to share their stories about their visits abroad on the Global Health Diaries webpage:

<https://uvmmedicineglobalhealth.wordpress.com/>

The following are a few poignant excerpts:



House Call, Uganda

## Uganda

“What I recall from the first week at Mulago is not the number of patients suffering from progressive illness or the shortage of human resources and medical supplies, but rather the abundant humility, humanity, and generosity that I witnessed not only from physicians and medical students, but also from Ugandans with a drive to incite change.”

Mary Kate LoPiccolo '18, *An Incredible Place*, November 6<sup>th</sup>, 2015

## India

Seeing medicine here is totally a shock. The conditions that the medicine community faces here is daunting, at least in my western tinted eyes. Space is limited; the surgeons operate in a single room with up to three other surgeries going on at the same time. Animals wander the lower levels of the hospital. And most striking is the infrastructure problems. Almost daily, we lost power in the hospital. The back-up generators almost always repowers everything within a couple seconds, but it's something surgeons must contend with while operating on patients.

Billy Tran '17, *Update from the Field: Operation Smile*, July 15, 2014



Operation Smile in India

Zimbabwe

“As I watched patients present to Pari hospital in Zimbabwe barely clinging to life, I was reminded of my experiences in Iraq and Afghanistan. This new encounter with death reinforced my commitment to serving others. At the end of life, patients rely on physicians to relieve suffering and provide guidance for the social and spiritual issues at hand. The training we received at Pari went beyond the mere science of pathophysiology and treatment protocols; it provided us with insight into the very human experience of working with patients during their most precious moments.”

[Richard Mendez '18, \*Mortality\*, September 22, 2015](#)

Zimbabwe

The result is that physicians are keenly aware of the cost of each procedure, scan, or treatment involved in their treatment plan for each patient. They advocate for their patient and the cost of their care at every turn. Indeed, Dr. Maturase, one of our attending physicians, explained to us his seminal research on how he has been able to demonstrate marked reductions in overall mortality in stroke patients without the use of imaging, based more on clinical presentation and the WHO stroke criteria. Therefore, while it is challenging to see patients dying here when their outcomes would have likely been much better in the states, it is impressive to see how this resource limitation has led to innovations that dramatically improve patient care.

[Stefan Wheat '18, \*A Paradigm Shift: Week One in Harare, Zimbabwe\*, July 8, 2015](#)



Stefan Wheat '18, Ruth Musselman, MD, Richard Mendez '18, and Stephen Winter, MD, part of the Parirenyatwa team in Zimbabwe



## Haiti and India

“My trips to Haiti planted a seed – a need to keep traveling, to experience different cultures, and to meet beautiful people and understand how health care manifests in different places. In Haiti I fell in love with people and medicine, and after navigating through the first year of medical school I found myself in need of an awakening, one that the Spiti Valley helped to provide. From Haiti and Spiti I’ve learned the importance of accessing those who are off the grid or forgotten due to lack of government resources, natural disaster or harsh landscapes. These experiences are in no way about imposing Western medicine and treating all those that need help; rather they are about supporting the local health care system, and connecting isolated individuals with the education they need to stay healthy.”

Shannon Brady '18, *From Haiti to the Spiti Valley, Come to Learn, Go to Serve*, [January 8, 2016](#)



Shannon Brady at the Rangrik India Clinic



Shannon Brady with the Medical Team in Haiti

## Russia

“The language barrier is probably the most challenging obstacle of being on our global health elective in Kazan, Russia. Barely anyone we encounter on the streets knows English. Bryce and I order food by pointing at something, and saying ‘pozhaluista’ (pronounced ‘pa-ZHAL-sta,’) meaning ‘please.’ Food we can manage, but I can’t imagine how we’d obtain a registration (required for legally staying here), deal with banking issues, or even activate a cell phone. It’s quite hard to communicate if you don’t speak the language.

In clinical practice, it is sometimes the patients who experience difficulty when communicating. Of course, they may be able to express their pain and concern through lay language, but they may not know that their swollen joint is a symptom of their rheumatoid arthritis, and that this disease may increase one’s risk for a heart attack. They might not understand why they need to take medications for hypertension, even if they are asymptomatic. Not everybody speaks the language of medicine. On a more literal level, we have learned that not every patient in Kazan hospitals speaks Russian. Kazan is a city where ‘East meets West,’ having two main population ethnicities: Russian and Tatar (a Turkic ethnic group with a separate language). While practically all ethnic Tatar people living in Kazan do speak Russian, those traveling from rural places may only speak their native language, and this further threatens communication between patient and doctor.”

Pierre Galea '17, *Update from the Field: Learning Russian*, August 11, 2014



Bryce Bludevich '17 and Pierre Galea '17 with Russian colleague, Mikhail Proropov, in Kazan, Russia



Lynn Sipsey and Saraga Reddy in Vietnam

## Vietnam

“We watch family members sit at their loved one’s bedside tending to them as if they were a fragile child – fanning them, feeding them water spoon by spoon, even ventilating them with an Ambu bag when there aren’t enough ventilators to go around. They remain ever vigilant – the patient’s advocate, nurse, caretaker, all the while sleeping on mats in stairwells and hallways. More than the patients, more than the doctors and nurses, these family members are the real heroes.”

Saraga Reddy '18, *A Cracked Door*, October 23, 2015, Vietnam



Saraga Reddy



# Anthropology and Global Health in China

*Professor Jeanne Shea, PhD*, in the Department of Anthropology at UVM, is a socio-cultural anthropologist who specializes in medical and psychological anthropology and the Chinese culture. Her work explores issues that are intergenerational touching on topics about gender, health and healing, development and aging, and the lifecycle.

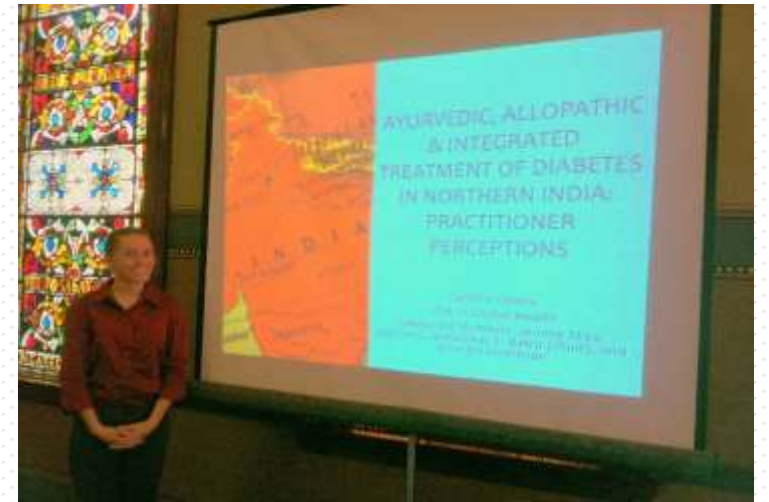


*Taking a research perspective* on Global Health, she works to understand “the challenges and the opportunities posed by the global population aging which is now beginning to affect lower and middle income countries. China is a middle income country at the forefront of this trend” (Shea).



Chinese woman in her nineties attending an adult day center in Shanghai, the city in China with the oldest population. Pictured here are the nonagenarian and a day center staff person.

Prof. Shea conducting ethnographic fieldwork in China at a senior center in Shanghai. This photo was taken during a gathering for a senior lunch with a neighborhood talent show by older adults.



Camille Clancy, UVM student in the Department of Anthropology, defends her senior honors thesis on the integration of ayurvedic medicine and biomedicine in India. Her project was based on a semester of fieldwork in India. The thesis was supervised by Prof. Jeanne Shea.

# Global Women's Health in Uganda and Tanzania

*Dr. Anne Dougherty, MD, MA*, UVM Assistant Professor of Obstetrics, Gynecology, and Reproductive Sciences and director of the UVM Global Women's Health Education Program, works to "raise the standard of women's healthcare globally through education, research and capacity building" and to "develop skilled, culturally compassionate women's health care providers here and abroad" (Dougherty).



Dr. Anne Dougherty



Dr. Dougherty teaching laparoscopy, Makerere College of Health Sciences, Department of OBGYN, Uganda



Drs. Wong, Dougherty and Meyer with Professor Byamugisha, Chair of OBGYN at Makerere University College of Health Sciences, Uganda





Med Students Whitney Thomas and Meri Ruhotima class of 2015 teaching about contraception at Wasso Hospital, Tanzania



Microscope donation from The Microscope Exchange, Tanzania

*Nurturing good relationships* with hospitals and medical schools in Uganda and Tanzania, she promotes and teaches global women's health both in the classroom at UVM and abroad. She sees preventative women's health as being crucial to the health of people worldwide. She stresses to her students the importance of partnering with peers, teaching from experience, and using "appropriate technology" to give the best medical care they can give.



Portable GYN clinic complete with GYN exam table made by med student Emily Ryan '18

*Entering a medical situation* in another country is about **asking** what is needed and **collaborating** with in-country partners to develop projects and programs that make sense in the local context and help reach the goals of the partner.



Ob ultrasound, Tanzania



Tanzanian friends



Maasai patients, Tanzania



*Dr. Dougherty* tells of how Makerere University in Uganda did not have access to up to date medical literature due to a lack of reliable internet. One of her accomplishments was to outfit a secure room in the hospital where there were computers, reliable internet access and a librarian to assist doctors with the research. She was also instrumental in bringing laparoscopy or minimally invasive surgery to Makerere by educating doctors and nurses on these procedures. These types of exchange between the institution and the visiting doctors and students are driven by needs identified by the partners in Uganda and Tanzania and build the capacity of the partner institution by providing them with technology and education to allow them to move forward.





# Physical Therapy Education in Australia and New Zealand



*International partnerships* in health education have been established to encourage new knowledge and research. In this respect, Global Health is approached as the opportunity to open pathways of communication between institutions from different parts of the world.



*Professor* Karen Westervelt MS, PT, FAAOMPT, PGDHSc, OCS, ATC, CMP, and Professor Sonya Worth PT, OCS, FAAOMPT, in the Department of Physical Therapy at UVM have established the first physical therapy study abroad program at UVM making strong connections with the physiotherapy schools at Auckland University of Technology in New Zealand and Bond University in Australia.





*There has been* little written on international collaboration in “Manual Therapy” and Professor Westervelt and Professor Worth seek to answer the question, “What is the impact of this International Manual PT Collaboration on participants?” (Westervelt)



*Participants* gained experience and knowledge in advanced manual therapy skills, international experience and advantages in professionalism.



“While abroad, students participated in manual therapy coursework, seminars, and cultural activities. During the 2-week immersion, journal data was collected from the UVM participants. 36 Bond University students and 11 faculty members were surveyed at the end of the experience.” (Westervelt)

- *“[This opportunity] has provided a depth and breadth of experience that would have been difficult to gain through on-campus learning only.” (UVM 11)*
- *“It gave me the chance to work with other individuals who gave a different perspective on specific techniques and a chance to improve my HVT’s.” (Bond 26)*
- *“I feel as though I am light years ahead of where I was before I got on that plane to Australia.” (UVM 10)*
- *“I was not comfortable handling necks during my first clinical and now I feel like my palpating skills have skyrocketed!” (UVM 2)*
- *“Australian physiotherapists have different ways of thinking about the same things we have been learning about for years and it is exciting to be able to bring that knowledge back to the states.” (UVM 4)*

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