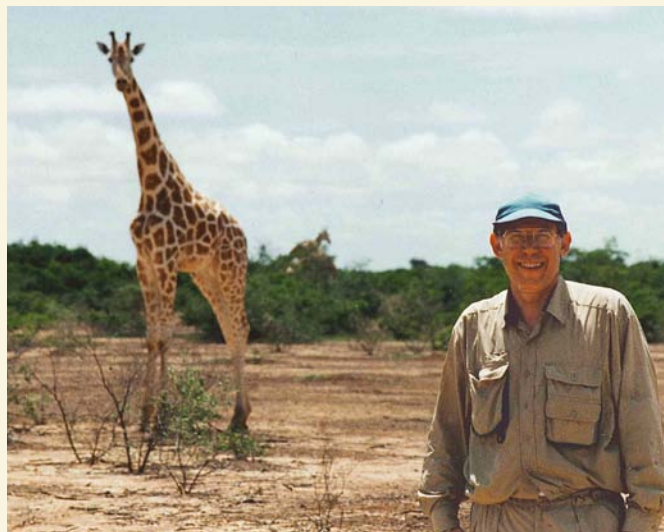


# *The Global Address*



## Dr. Gabbe on Going Global



Steven Gabbe, MD, CEO, OSU Medical Center

Welcome to the inaugural edition of *The Global Address*, a quarterly newsletter of the Health Sciences Colleges at The Ohio State University. I am particularly delighted to introduce this publication because it represents not only the activities, achievements, and aspirations of each of the Health Sciences Colleges in the area of global health but will also highlight the many cross-college collaborations that are happening with increasing frequency in the medical center.

Global health is a dynamic and rapidly growing field of interest for students, not only at OSU but around the country. Most of our colleges support a variety of international activities, but the creation of the Health Sciences Center for Global Health provides the structure to harness our tremendous expertise and significantly leverage our unique strengths as a large diverse campus and comprehensive health science cluster to educate future global health educators, research scientists, administrators and clinicians.

*Continues on page 2*

## The Health Sciences Center for Global Health Opens

The Health Sciences Center for Global Health is now open and ready to serve the students and faculty of the medical center and beyond. Located on the first floor of the Prior Health Sciences Library, the center aims to inspire and equip students to pursue careers in global health. Center Director Daniel Sedmak, MD, and co-Director Mary Ellen Wewers, PhD, MPH, are also the investigators on the recently awarded framework grant from the Fogarty International Center of the National Institutes of Health. The framework grant, which targets developing countries, will allow the center to create even greater opportunities for OSU students in both research and education.



Mary Ellen Wewers, PhD, MPH



Daniel Sedmak, MD

*Continues on page 2*

**Editor's Note:** As we reported in the fall 2008 issue of *The Global Address*, OSU received a NIH Fogarty International Center grant that supports the creation of new, multidisciplinary educational programs as well as an administrative infrastructure to support activities. The Health Sciences Center for Global Health is the new office that will initiate and coordinate these activities, including this newsletter, for all the Health Sciences Colleges. We hope you will enjoy reading about all of the global health activities across the medical center in the expanded newsletter.

## Dr. Gabbe on Going Global *Cont. from page 1*

Center Director, Daniel Sedmak, MD, (COM) and co-Director Mary Ellen Wewers, PhD, MPH, (CPH) have a passion for global health that is reflected in their excitement for this new initiative and I encourage you to share your ideas with them.

My wife, Pat Gabbe, MD, and I know personally how deeply global health experiences can affect a student's life and future choices. Our son Adam, an Ohio State alum, was in the Peace Corps and spent nearly three years in Niger, West, Africa, teaching villagers how to build wells for pure water. He then went on to work for the Lutheran World Relief Agency in Niger.



Map of Niger from The World Factbook, CIA.

As you read this issue you will learn of many of the international opportunities that currently exist in our medical center as well as some new programs that are being developed. I encourage you to expand your horizons and your knowledge of the world and participate in an international trip. As you will gather from the stories in this newsletter, these are often life changing experiences, just as they were for our son.



Dr. Gabbe (Pat) and son, Adam Gabbe, in Niger.

### Did you know...

Ohio State ranks No. 2 in Peace Corps' graduate school rankings.

## The Health Sciences Center for Global Health Opens *Cont. from page 1*

There are multiple approaches to limiting and ultimately solving the majority of global health concerns but none is more fundamental than increasing the number of individuals working in the various fields of global health such as teaching, prevention, clinical care and research.

While the Health Sciences Center for Global Health is in the early stages, the framework grant creates a significant opportunity to advance a mission that allows us to nurture and train the next generation of global health professionals for whom cross-discipline collaboration will be the norm.

In that spirit, the following special feature highlights the OSU Health Sciences Colleges and their global health activities here and around the globe. In the coming year, *The Global Address* will bring you stories of the exciting new initiatives that are being developed.



The new Health Sciences Center for Global Health is located in Suite 165 of the Prior Health Sciences Library.

The Center's global health activities are focused on mid- and low-income countries often referred to as developing countries.



## Getting to Know the College of Dentistry

The OSU College of Dentistry is the 5<sup>th</sup> largest in the US with an array of academic programs. There is a strong culture supporting interdisciplinary research through ongoing relationships with programs such as the Institute of Behavioral Medicine Research and the Comprehensive Cancer Center. Two current projects are the Ohio Project (\$1.5 M-Robert Wood Johnson Foundation) and the Health Outreach Mobile Experience (funded by the Delta Dental Foundation and other partners) which translates dental education to underserved community-based sites. Dentistry's faculty and students work with Shoulder-to-Shoulder (Honduras) and the Global Youth Partnership for Africa (Uganda), and its pre-doctoral students have traveled to developing countries to provide educational services, health screenings, and dental services.



Four members of the dentistry student team strike a pose in Santo Domingo.

### What They're Doing

#### *Santo Domingo, Dominican Republic*

Nine College of Dentistry students spent December 12–21, 2008 in Santo Domingo, Dominican Republic, where they were paired with local mentors who introduced them to the Dominican culture, while also preparing them for their time as international health-care volunteers. Providing free dental treatment to members of the local community, the students performed dental restorations, removed decayed teeth, and provided cleaning and preventive dental care.

With an improvised clinic set up in a local church, the working facilities included four portable dental operatories and a separate area with five dental hygiene stations. The students focused on providing as many essential treatments as possible, serving a total of 429 patients and performing 662 dental procedures throughout the 10-day trip.



#### *Kampala, Uganda*

While many students packed their bags and headed home for the 2008 winter break, a group of OSU dental students traveled to Makerere University in Kampala, Uganda, to provide local villagers with free dental care and oral health education.

Having already made a successful excursion to Uganda in 2007, the students recruited more volunteers to join the team for the December 2008 visit, which included: Cheryl Lampe, DDS (OSU faculty member), Chris Balsly and Jennifer Cohen (4<sup>th</sup> year dental students) and Dawn Broyles, Andy Gilbert and Tyrun Ray (3<sup>rd</sup> year dental students).



Top left: 2011 Class President Joshua Muir with a child from a local orphanage in Santo Domingo.

Top right: OSU dentistry professor Cheryl Lampe examines a patient at a makeshift clinic near Kampala.

Left: (left to right) Dr. Cheryl Lampe, Andy Gilbert, Jennifer Cohen, Rebecca Goldberg, Tyrun Ray, Dawn Broyles, and Chris Balsly are pictured outside Kampala's Langebaek Dental Complex.

Questions on global activities for the College of Dentistry should be directed to Abdel Mohammad, DDS, at mohammad.6@osu.edu.

## Getting to Know the College of Medicine

The College of Medicine (COM) consists of faculty and research scientists in 37 departments, two Schools (the School of Allied Medical Professions and The School of Biologic Sciences) and 19 multidisciplinary Centers and Institutes. Located in the College of Medicine, the Office of Global Health Education was established in 2005. It provides medical students with the opportunity to learn about global health issues through didactic, self-study and participatory learning. The COM has developed formal affiliations with partners in developing countries around the world and is currently exploring affiliation opportunities with institutions in sub-Saharan Africa. Global health clinical experiences are also provided to students within the city of Columbus.



Daniel Sedmak, MD, (center) being greeted by faculty members of Wenzhou Medical College in China.

## What They're Doing

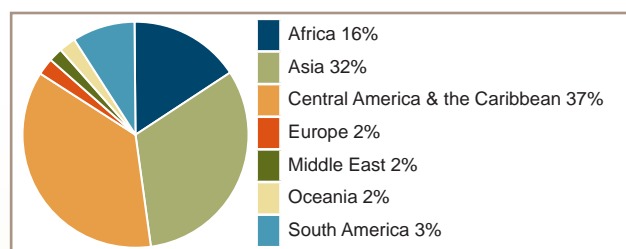
### Affiliations

Partnerships with international academic institutions provide our students with opportunities for meaningful global health experiences. The development of formal affiliations helps ensure that the goal of creating and maintaining a core set of international rotation sites that offer high-quality, consistent and mentored clinical experiences in a safe environment is met. The choice of affiliations is guided by a strategic plan to focus on developing nations, particularly in Latin America, Asia, and in 2009, Africa.

The COM has formal affiliations in China with Xi'an Jiaotong University SOM, Wuhan University HSC, Wenzhou Medical College, and Zhejiang Provincial Hospital of TCM. Sites in India are PSG Institute of Medical Sciences and Research and Amala Institute of Medical Sciences and in Peru, Universidad Privada Antenor Orrego Faculty of Medicine.

### Global Health Electives

The Class of 2008 completed 44 Global Health Electives in 12 countries. Elective experiences ranged from working with a health care development and refugee aid organization in rural Guatemala to caring for HIV patients in South Africa.



### International Health Interest Group

The student-led International Health Interest Group (IHIG) educates medical students about the rewards of being involved in global medicine, and assists in facilitating experiences for pre-clinical students.

### Ride for World Health (R4WH)

Ride for World Health is a non-profit, charitable organization founded in 2004 by a group of medical students and healthcare professionals who seek to promote global health issues and awareness. R4WH also organizes the annual Global Health Day that this year will be held on May 15.

### Clinical Outreach: Students (and Faculty)

Medical students volunteer at the Rardin Family Practice Center, which houses the Asian and Latina free clinics. The clinics provide care for primarily non-English-speaking low-income patients.



Questions on global activities for the College of Medicine should be directed to Pam Potter at [pamela.potter@osumc.edu](mailto:pamela.potter@osumc.edu).



## Getting to Know the College of Nursing

*The College of Nursing is ranked a top 20 school in the US News and World Report 2007 rankings. The college has maintained an active level of biobehaviorally-focused research in tobacco use and tobacco-attributable diseases for the past 15 years. For the past nine years, senior undergraduate nursing and masters level Nurse Practitioner students have joined with a prominent non-governmental agency to establish an ongoing yearly experience in Tegucigalpa and Choluteca, Honduras. The goal is to offer primary care and health promotion to rural Hondurans who*

*would otherwise not have access to care. The educational goal for the students is to help them experience community primary care in rural disadvantaged settings. Students are introduced to community nursing in rural southern Honduras and learn to perform health assessments and provide health promotion sessions for the residents of these communities. The Nurse Practitioner students perform health assessments, diagnose illnesses, recommend treatment plans and refer to their partner Honduran physician as needed.*

## What They're Doing

The team from the College of Nursing will leave for Honduras on March 12 for their tenth trip. There will be 36 people on the team that will include senior undergraduate students, graduate students in several primary care specialties, faculty from the College of Nursing, a physician, a faculty member from the College of Pharmacy with two of his graduate students, a pharmacist and a work assistant. Each of the members of the team will attend several pre-trip mandatory sessions to learn about the culture of the populations they will be serving, how to respectfully serve those populations, the places where they will set up clinics, the resources they will have available, and how to put together a successful health fair for the populations they will serve.



This experience not only provides the Honduran patients with sustainable, high-quality health care, but it also fulfills the College's objective for global outreach. In addition, the trip provides the students with an unforgettable and intense experience in the challenge of health care where there is little or no technologic support.



Map of Honduras from The World Factbook, CIA.



Questions on global activities for the College of Nursing should be directed to Elizabeth Barker, PhD, at [barker.203@osu.edu](mailto:barker.203@osu.edu).

## Getting to Know the College of Optometry

*The College of Optometry at OSU is one of only 20 schools and colleges of optometry in the US and Puerto Rico. It is widely acknowledged as the premier research and training location for patient-oriented research in optometry. Student Volunteer Optometric Services for Humanity (SVOSH) is a charitable student organization within the OSU College of Optometry (and at other schools of optometry) dedicated to providing vision care. In addition, SVOSH also provides eyewear to people in developing nations. The experience is a unique educational opportunity for the students who travel and deliver the care, with SVOSH students making trips to Belize, Brazil, Costa Rica, Colombia, Dominican Republic, Ecuador, Kenya, Mexico, Tanzania and Venezuela. Its current membership at OSU numbers 55 students.*



## What They're Doing

On August 30, 2008, 39 volunteers left for Ecuador as part of Student Volunteers for Optometric Service to Humanity (SVOSH). The group included 29 students, four doctors, two helpers, and four Spanish translators. Their mission was to provide vision care to people who could neither afford nor obtain such care. Organized by Ohio State's SVOSH President, Jill Scullion, this trip was designed to help twice as many as last year.

Students were able to see patients every 10 to 15 minutes. Those who were giving exams quickly brushed up on their retinoscopy and direct ophthalmoscopy skills since these were the main diagnostic tools. The dispensary was always busy with every patient receiving a pair of sunglasses and those who

needed a prescription receiving eyewear or medication. The students saw nearly 300 patients the first day. Some of the most common findings were expected, such as untreated presbyopia, hyperopia, cataracts and glaucoma. More unique findings included large inflamed pytergia, toxoplasmosis, retinal detachment, and macular stars.

Some students had to be quite creative when it came to giving exams. An elderly woman in a homemade wheelchair would not fit in to the exam area, so 4<sup>th</sup> year student, Jen McNamara, conducted the exam outside in the sun. In order for her to see the retinoscopy reflex, other students helped to hold a blanket over the woman so that the conditions would be dark enough. In total over 2,700 patients were seen in only four days.



Above: 2008 SVOSH group in Ecuador

Left: Jen McNamara ('09) examining a woman in a "wheelchair"

Questions on global activities for the College of Optometry should be directed to Karla Zadnik, OD, PhD, at [kzadnik@optometry.osu.edu](mailto:kzadnik@optometry.osu.edu).



## Getting to know the College of Pharmacy

*The College of Pharmacy is extensively involved in the process of discovery and dissemination of knowledge in the pharmaceutical sciences and pharmacy practice. This involves research collaborations with colleagues in a number of countries. Global initiatives in the College of Pharmacy include agreements of scholarly exchange with National Taiwan University, Yang-Ming University, and China Medical University with the goal of fostering advancement of pharmacy education, promoting scientific*

*research, and enhancing understanding and collaboration between faculties. The College is also a member of the US-Thailand Consortium to help advance their graduate and professional educational programs.*

*The College seeks to expand student understanding of global health issues through study abroad experiences as well as the expansion of international clinical rotation opportunities.*

## What They're Doing

### *College of Pharmacy participates in the US-Thai Consortium*

The College of Pharmacy is a member of the US-Thailand Consortium of Schools/Colleges of Pharmacy. This consortium was formed in 1993 and focuses on advanced degree opportunities for Thai students at the PhD or PharmD level. Several current faculty at the Schools/Colleges of Pharmacy in Thailand obtained their PhD degrees from the College of Pharmacy during the first 15 years of the consortium agreement. This agreement was extended in July 2008 by the US and Thailand schools/colleges for another 15 years and expanded to include advanced training in clinical pharmacy areas as well as graduate education in the pharmaceutical sciences.



### *Topics in International Pharmacy*

A new seminar course, Topics in International Pharmacy, was initiated Winter Quarter 2009 in the College of Pharmacy. This course will be a component of the emerging Interdisciplinary Specialization in Global Health and focuses on the practice of pharmacy in other countries. Presentations by faculty and students serve as the foundation of instruction. International practices of pharmacy are being presented by OSU faculty A. Douglas Kinghorn, PhD, DSc (United Kingdom), Esperanza Carcache de Blanco, PhD (Nicaragua), Milap Nahata, MS, PharmD (India), Sylvan Frank, PhD (Sweden), and Dean Robert Brueggemeier, PhD (Thailand). Visiting faculty members will discuss the practice of pharmacy in Taiwan. Students will present on a variety of other countries from around the world. The course is coordinated by Brueggemeier and Kenneth Hale, RPh, PhD, and 25 Bachelor of Science in Pharmaceutical Sciences and PharmD students are enrolled.



### *College of Pharmacy Partnerships in Taiwan*

The College of Pharmacy has enjoyed a good relationship with universities in Taiwan for a number of years. Since 2006, they have partnered with National Taiwan University (Taipei) and China Medical University (Taichung) to collaborate on educational and clinical practice development. These institutions will be among the first in Asia to implement Doctor of Pharmacy (PharmD) programs. Discussions are underway to determine mechanisms for the faculty in Ohio State's College of Pharmacy to support these programs through the use of distance-learning technologies. Additional collaborations relate to exchanges of student clinical rotations and clinical preceptor training. Dr. Fe-Lin Lin from National Taiwan University and Dr. Hsiang-Wen Lin from China Medical University will visit Ohio State in February to plan the next steps in these partnerships.



Questions on global activities for the College of Pharmacy should be directed to Robert Brueggemeier, PhD, at [brueggemeier@pharmacy.ohio-state.edu](mailto:brueggemeier@pharmacy.ohio-state.edu).

## Getting to Know the College of Public Health

The College of Public Health (CPH) is the only fully accredited college of public health in Ohio, and has the largest and most comprehensive public health offerings in the state. The College is organized internally into five divisions: Biostatistics, Environmental Health Sciences, Epidemiology, Health Behavior and Health Promotion, and Health Services Management and Policy. In addition to the academic divisions, the College contains the Center for Health Outcomes, Policy, and Evaluation Studies (HOPES), and the Office of Workforce Development. The academic programs of the College are presently concen-

trated at the graduate level. The interdisciplinary nature of public health is evidenced by the combined degree programs offered including MPH/MD, MHA/MD, MPH/JD, MHA/JD, MHA/MBA, MPH/MS, MPH/PharmD, and MPH/DVM. Cancer prevention research (including early detection/screening, exposures and tobacco control), environmental health risks and public health preparedness (especially infectious diseases and workforce training) are areas of emphasis within the College. Most recently, the College of Public Health joined with the College of Medicine to create a Health Sciences Center for Global Health.

### What They're Doing

Researchers and students from The College of Public Health are going to places such as Sichuan Province in China, Bangladesh in India and the Republic of Uganda in East Africa. They are witnessing first-hand global health problems—overcrowded living conditions, poor water supply and limited access to quality health care.

The College offers the class, *Global Health in the 21<sup>st</sup> Century* to incoming freshman. Students in the class learn about threats to global health including infectious diseases and malnutrition.

They also learn about the social, behavioral and biological factors that influence these threats.

The CPH also offers, *Introduction to Global Health*, which will be a core course of the Graduate Interdisciplinary Specialization in Global Health (GISGH) that is currently under development by the Health Sciences Center for Global Health. The creation of the GISGH is one of the aims of the Fogarty framework grant on which Mary Ellen Wewers, PhD, MPH, serves as co-investigator.



Mary Ellen Wewers, PhD, MPH, teaches *Global Health in the 21<sup>st</sup> Century*.



Overcrowded conditions in Bangladesh



Contaminated water supply in Bangladesh

Questions on global activities for the College of Public Health should be directed to Mary Ellen Wewers, PhD, MPH, at [mwewers@cph.osu.edu](mailto:mwewers@cph.osu.edu).



## Getting to Know the College of Veterinary Medicine

The College of Veterinary Medicine is ranked 5<sup>th</sup> in the country by US News and World Report and is 10<sup>th</sup> in NIH funding to schools of veterinary medicine. The college has strong interdisciplinary research programs in the areas of cancer, endocrinology, rickettsiology, and retrovirology. The College has a graduate program with about 70 students who pursue the MS and PhD degrees in experimental pathobiology, molecular biology, biochemistry, microbiology, molecular virology, veterinary preventive medicine, public health, epidemiology, and clinical sciences among others and has developed a unique interdisciplinary

Veterinary Public Health Specialization towards a Master of Public Health Degree with the College of Public Health. The college has a long-standing tradition of international collaborations. Faculty and students have engaged in health-related veterinary projects (e.g. zoonotic foodborne pathogens and parasitology) in low-income countries such as Thailand, Venezuela, Egypt and India. Formal collaborative partnerships have been established with Chiang Mai University in Thailand, Bogor University in Indonesia, and Assiut University in Egypt.

## What They're Doing

In June 2008, veterinary student Pamela Fry and MPH-VPH students Megan Whitehead, Kim Baskerville, and Narry Tiao from The Ohio State College of Veterinary Medicine and College of Public Health traveled to Uganda for the International Animal Production, Disease Surveillance and Public Health course. The four-week trip was filled with learning about different cultures and their systems relating to veterinary medicine, public health, microbiology, and food safety. The course was divided into animal production systems, bio-surveillance and bio-security, veterinary services in Uganda, control programs for zoonoses and public health, food safety in Uganda, as well as many other field trips and hands-on experiences. There will be another group going in June 2009.

This past December an elective course in global veterinary medicine was offered to veterinary medicine students and Veterinary Public Health (MPH-VPH) students. Cultural and intellectual issues when traveling and working in the veterinary public health field abroad or in non-traditional veterinary medicine practices were discussed. Adaptation and proper interaction with diverse cultures were the main emphasis. The class was interactive and one session included federal agency representatives and others who discussed opportunities in global veterinary medicine and public health. Twenty-seven veterinary and MPH-VPH students attended this course.



Map of Uganda from The World Factbook, CIA.



Left: MPH-VPH student Megan Whitehead collecting information about lions in a national park in Uganda.

Above: MPH-VPH students, Narry Tiao and Megan Whitehead, share their breakfast with a hungry elephant during the Uganda International Animal Production, Disease Surveillance and Public Health course.

Questions on global activities for the College of Veterinary Medicine should be directed to Armando Hoet, DVM, PhD, at [hoet.1@osu.edu](mailto:hoet.1@osu.edu).

## Getting to Know the School of Allied Medical Professions

*The School of Allied Medical Professions (SAMP) is a nationally recognized leader in practice-based health care education. SAMP offers 11 undergraduate degree programs, two master's degree programs, a doctorate of physical therapy program and a PhD program. The OSU Physical Therapy Division, in collaboration with the Physical Therapy Program at Wheeling Jesuit University, has recently established a partnership with the Mission of Friendship, an outreach project supported and funded by the Roman Catholic Diocese of Erie, Pennsylvania, based in the city of Merida within the state of Yucatan in Mexico. For the past two years, groups of OSU physical therapy faculty and students have provided physical therapy care for poor and disadvantaged individuals in a variety of settings in Merida.*



Elise Kauffman, DPT, teaching a mother how to perform passive range of motion on her 5-year-old daughter who suffered from hydrocephalus as an infant.

### What They're Doing

#### *SAMP Students Study Aging in Developing Countries*

During autumn quarter 2008, students in Allied Medicine 665, taught by Margaret Teaford, PhD, studied aging in developing countries, including Ghana, South Africa, Jamaica, Costa Rica, St. Lucia, Argentina, Chile, Thailand, India, China, and Jordan.

#### *Newest Faculty Member in SAMP is a Health Disparities Researcher*

Ranjita Misra, PhD, CHES, was newly appointed in September 2008 as an Associate Professor in the Health, Wellness and Medical Dietetics Division of the OSU School of Allied Medical Professions. Dr. Misra is a health disparities researcher with a focus on health promotion and chronic disease prevention (e.g., diabetes and cardiovascular disease) among minorities and immigrants.

#### *Physical Therapy Students Participate in Service Learning in Mexico*

In December 2008, 10 Doctor of Physical Therapy (DPT) students and OSU physical therapy faculty traveled to Merida, Mexico as part of the Allied Medicine 760S course, Service Learning in Global Health. The course included 8 days of supervised clinical experience, daily reflections and opportunities

to learn about the Maya and Mexican cultures. Future plans include continued consultation with the physical therapy faculty at Universidad Autónoma de Yucatán to help them meet their goal of developing a Master's degree program in physical therapy.

#### *Physical Therapy Students Participate in Global Health Practicum*

Elise Kauffman, PT, DPT, completed a 10-day experience in Kampala, Uganda prior to her graduation in August 2008. She provided physical therapy services in a variety of settings and worked at the Katalamwa Cheshire Home for Rehabilitation Services, a medically-based rehabilitation home for children in Mengo Hospital, a general hospital in Kampala. She noted striking differences between rehabilitation in Uganda and the US. Promoting independence in people with disabilities is not a widely held view in Uganda because the infrastructure struggles to meet basic health needs. The experience helped to cement Kauffman's career plans that include participating in global health projects and educating healthcare professionals and students about global health needs. This practicum was completed as part of a required course in the physical therapy curriculum. Immediately preceding graduation, each student completes an eight-week mentored experience of special interest related to their future career.



OSU physical therapy faculty and students conduct an exercise class at a nursing home in Merida.



OSU DPT students Lindsey Kramer and Karen Buddy perform exercises with a patient with cerebral palsy.

Questions on global activities for the School of Allied Medical Professions should be directed to Anne Kloos, PT, PhD, NCS, at [anne.kloos@osumc.edu](mailto:anne.kloos@osumc.edu).





# my take

by Ayesha Khan, MD  
Department of Emergency Medicine

When I went to Northern Pakistan in my intern year of residency to help in the earthquake relief effort, I thought I was prepared.

I knew the facts: on October 8, 2005, an earthquake of magnitude 7.6 destroyed its epicenter, the town of Muzafarabad as well as most of northeast Pakistan. A quarter of a million people died, a million people were injured, and four million people were displaced due to collapsed infrastructure.

I knew the language and culture: Urdu, the national language, was the mother tongue of my parents.

I had supplies: one suitcase full of charitable donations like warm clothes, medical supplies, and shoes for the surviving victims, a smaller backpack of my gear, including the clothes I hoped would keep me warm in the -5°C (20°F) weather and medical instruments I hoped would be useful in examining patients.

I knew the particulars: I would meet the medical team of Relief International, an LA-based non-profit organization, that was already on the ground, in Islamabad. From there we would drive four hours north to the mountainous region of Mansehra, a small village and now center of operations for the many organizations offering aid.

Armed with these facts, I arrived in Pakistan in the last days of 2005; only to find my carefully crafted preparedness was soon to fall away.

It started when my luggage didn't make it. While delayed luggage was in itself not the end of the world, I had managed to arrive on a day when both the home offices and the Pakistan offices of the airline were closed for the Christmas holiday and Eid festival respectively. I quickly realized that I would have to make do with what was in my carry-on; fortunately this included a winter coat and my stethoscope.

I stepped into the chilly morning air to find my ride. Upon locating a car with the

"Relief International" sign, I was greeted by the driver. We exchanged introductions and he told me he was supposed to drive me up to Mansehra. Slowly the houses grew farther and farther apart, replaced with mud shanties surrounded with families going about their work: moms cooking on a small open fire, older children tending to livestock, younger half-dressed children playing in the dirt, a grandmother carrying fuel to the fire. Mud shanties gave way to hills, then mountains, and soon we were on trails, rather than roads, the car's wheels painstakingly picking their way among the sharp rocks, my stomach lurching with every jolt.



Rounding a turn, I finally saw our destination. A small village now crowded with foreigners, where the infrastructure still stood, for the most part. We pulled into the guesthouse and I was greeted by Florin, the woman in charge of Relief International's ground operations in Pakistan.

"Hi!" she said in her soft Afghani accent tempered with years of living in the US, "you must be Dr. Ayesha. Please come in." She started walking me through the house while giving me an orientation. This is the guest house that serves as both our offices and living quarters. The living room does not have much furniture in it because we spend our money on

the people who need it. Through there is the kitchen, help yourself if you need anything. I'll show you to your room, it's upstairs. Right now, only you will be staying in it but later on we may get more people. Also upstairs is the main office where we have computers. We are fortunate enough to have had the UN give us a satellite so we can connect to the internet at times. This is your room, it has a heater but the gas lines fluctuate so you can only warm it while you are in the room and if the gas happens to be on. This is a binder that has information about the general medical conditions of the area. You can read through it and when you come down for lunch, I'll show you our medical supplies. We go farther north to do our work, to the tent cities. It's about an hour drive. There we have a clinic that serves Daryal Camp, the tent city the Pakistan Army looks after. Even farther north, we have another clinic in Battagram. If you want to, you can go there as well but we already have a doctor there. The primary languages people speak are Pashto or Hindko. Very few speak Urdu, but usually you can find someone who can help you understand the point so hopefully it won't be too much of a problem. Any questions?"

I stared at her, slightly overwhelmed. I managed to sputter out that I had lost my luggage and needed at the least, shoes to wear in the snow. She told me she had a pair I could borrow. Then I whispered the burning question on my mind, "Where is the rest of the medical team?" "Team?" she replied. "There is another doctor who will pick you up to drive you tomorrow morning to Daryal Camp. Is that what you mean?" I looked at her for a moment, nodded and quickly went into my room. Once there, I paused long enough to take a deep breath and regroup. In essence, the game was the same but the rules had changed. I tried to reassure my pounding heart, it would be all right.

*Continues on page 12*

I didn't have my luggage. I didn't have my medical supplies. That was OK. I had my stethoscope, I had an otoscope. I could make do with those. I had two changes of clothes, wash one, wear one. I could manage.

I didn't speak the language. My grandmother spoke Hindko so hopefully I would recognize some words and, as Florin had said, hopefully we could get the point across. It was not the culture I was expecting. That was OK, too. It was just more conservative than I thought. I could adjust, I could learn from my patients; after all, I didn't know the culture of every single patient I encountered in the US either.

There was no medical team. That was fine. There was another doctor. He would help me and I was willing to work hard.

I sat on the edge of the metal cot that was to be my bed, binder in lap, and glanced around the room. The walls were spidered with cracks, from the earthquake. Of course.

There was a tiny heater, its orange-blue light cutting the chill in the room. Taking one more deep breath, I opened the binder and began to read. Statistics and case reports jumped out at me. We were in the post-disaster phase. Acute injuries were healing by now or had managed to kill their victim. The problems we were dealing with were those of people living in cramped primitive conditions with little food, no clean water supply, exposure to the elements and little knowledge about basic hygiene. The most common diagnoses, my binder told me, were diarrhea, dysentery, pneumonia (including tuberculosis), skin and soft tissue infections, and cold exposure injuries. I read through the binder memorizing every bit of information that might help me in treating these illnesses of which I had only seen distant relations. My anxiety building, I heard the call for lunch.

Walking down the stairs, I was greeted by about 20 people, sitting cross-legged on the cement floor, flanking a tablecloth that was set for lunch.

I sat down at one edge and we went through the quick introductions. Florin and I were the only women. Finishing our meal of *dal* (lentils), *roti* (bread), and rice, Florin got up to show me the medical supplies. I followed her into a room off the living room.

"The UN gave us two emergency medical kits; each contains enough medicine to treat 10,000 people for six months and surgical

supplies. We also have medicine donated by individuals and companies."

I looked in amazement as she opened the door to a room with rows and rows of tables, covered with box after box bearing the World Health Organization (WHO) logo. The floor was littered with big sacks of medicines.

"You can use whatever you need. We haven't had a doctor to go through everything. In fact, we're not even sure what some of these things are!"

I looked where she was pointing. It was an autoclave! Presumably it came with the surgical supplies. I stood in awe as Florin told me I could go through the kits to see what I needed. Sifting through box after box, I realized there was no medicine I would need that was not here. And in the largest box bearing the WHO logo was a manual, Emergency Health Kit: basic unit guidelines. Instructions! The kit came with instructions! I grabbed the instructions and ran up to my room. I poured over the pages that contained every treatment protocol for which I could hope, pediatric care, adult care, dysentery, diarrhea, worms, meningitis, fever of unknown origin, skin and soft tissue infections, anemia, urinary tract infections, respiratory tract infections . . . I started to feel better prepared to face the morning.

The morning brought with it Dr. Amir, the doctor who was to drive me farther north to Daryal Camp. I tried to ask Dr. Amir about Daryal Camp and the people there and what he had been seeing medically, but he was less interested in answering my questions than he was in pointing out scenic views for me to take pictures. "There it is," he said. Expecting another pretty view, I turned to look at what he



(each a classroom) that comprised the school, and finally, at the far end, the clinic. Inside the clinic were little plastic racks holding medicine, a chair, a table, a screen, and, interestingly enough, a laundry basket containing ET tubes, IV tubing, and Miller blades. Also in the clinic was Auntie, an elderly woman who informed me she would be my translator.

"Translator? Great!" I exclaimed. "So you speak Pashto?"

"No."

"Hindko?"

"No"

"Oh. So what do you speak?"

"English and Urdu."

"Oh. The same as me. Great."

"I'm also your chaperone."

Chaperone?!

I turned to see a small group of men clustered by the clinic door. When I turned back to ask Dr. Amir how he wanted me to staff patients, he was gone! Slightly confused, I headed over to the clinic and started examining my first patient, a baby with an awful cough. I listened to it's lungs, touched it's skin to see if there was a fever and counted respirations like the WHO manual instructed. The baby had pneumonia. I wanted to measure it's oxygen level to determine what to do but I looked around in vain for a pulse oximeter.

I walked outside, looking for Dr. Amir. Spotting him chatting with some of the soldiers guarding the camp, I went up to him: "That baby has pneumonia." He looked at me blankly. "That baby has pneumonia," I repeated. "So?" He looked confused that I was talking to him. "Treat him for it." With that remark he turned back to his conversation. Shocked, I walked back to the clinic. Did he know I was an intern? Did he know he was supposed to supervise me? Did he know that five months ago, I was a medical student?!

I pulled out my WHO book, looked at the parameters it specified in measuring to assess severity of disease in pediatric pneumonia and the treatment recommended. I handed the dad a bottle of trimethoprim/sulfamethoxazole and wrote 2 tsp, 2 times a day on it. Auntie, sitting on a seat next to me, scribbled down the patient's name in a little book. The dad smiled his thanks at me and the next patient came in.



hundreds of tent cities sponsored by various agencies but this is the largest one. This one contains our clinic. It's muddy. Can you manage?"

*Continues on page 13*



The pace picked up and I soon forgot my utter confusion at Dr. Amir's behavior. Patient after patient walked into our tent. As an intern, a busy 10-hour shift in Detroit meant me seeing about 12 patients. I lost count of how many I saw that day but I was sure it was more than 12. Soon enough, the sun set and I looked up to see Dr. Amir instead of another patient. "Ready to go? How was your first day?"

Not quite sure how to answer, I mumbled, "Busy."

"Oh she did great!" chimed in Auntie, my translator, chaperone, bookkeeper, and I had soon found out, all around helper. "She saw 97 patients." Ninety-seven? In 12 hours? I had done that? The fatigue lifted from my shoulders as I contemplated that number. Ninety-seven! "I knew she would be OK when I saw her willing to trudge across that mud," said Dr. Amir.



We drove back to the rest house. I decided to take a few minutes on the internet to look up all the stuff I didn't know (things that weren't in the WHO book). I then went downstairs to dinner, *dal*, *roti*, rice. After dinner, I decided to go through the bags of assorted medicines and try to sort them out or categorize them. Most of the night was spent doing this. The next day was a repeat of the first: me and Auntie seeing patients, Dr. Amir driving us home, internet for things I didn't know, dinner and then sorting medicines. One day flowed into the next until one morning, I was met at the clinic door upon my arrival by a woman clutching her baby with tears running down her face. "Please! Please!" she kept saying as she thrust the baby in my arms. I looked down to see the baby wasn't breathing. "Where can we go?" I asked Auntie. "Where is the closest hospital for the baby? How can we get there?"

Somehow my translator/chaperone knew exactly what to do. She grabbed one of the soldiers, asked him to take us to the US Army base about 40-minutes away. As I started to resuscitate the baby, she told me that the Base has a medical tent but it is very hard for local people to get in it. She was hoping my American passport would be the ticket into the Base. The soldier gunned it as I sat in the back of the truck with the baby in my lap. "It'll be OK," I kept saying to the mother; really I was trying to convince myself. I went through the PALS algorithm as best as I could, each time reassessing the baby. I found she was breathing on her own. Slow, too slow, but the

breaths were her own. Her heart was beating too, again, too slow, but it was there. As we neared the first checkpoint I started screaming, "I'm American, I'm American. Please let us in. I have a baby who is not breathing." I suppose my accent was proof enough because they grabbed me and the mom and baby, had us empty our pockets in one second flat, and rushed us into the Base. A doctor grabbed the baby in the trauma bay and two nurses got to work undressing and assessing while I filled them in on what I had learned on the ride over.

The army medical team listened to my report and moved around the baby without missing a beat. They hooked her up to oxygen, IV and a monitor. They stimulated her by rubbing her. The blips on the monitor got closer together, her breathing picked up, heart rate picked up, and soon she was awake and crying! I thanked God. The mom grabbed me and started weeping. The team turned around to look at me and we exchanged smiles of relief. The doctor from the team paused long enough to say, "And who are you exactly?"

From that point, I knew I had the support of the US Army.

Days passed and each was filled with activity. Over the next weeks, I helped write a proposal to the UN to increase aid for maternal fetal medicine. I went to the school and taught the children basic hygiene. I got the women together and talked about birth control and safely cutting the umbilical cord, dirty blades had caused tetanus to spread through many of the newborns. I went farther north for a day trip to Battagram and spent it seeing all the women of that tent city, there was a doctor there but many of the women wouldn't see a male physician. Auntie and I took a trip to the market and bought shoes for as many women and children as we could, frostbite was rampant among the barefoot people of the tent city. And still everyday, I saw nearly 100 patients. Some faces greeted me more than once and soon became more my friends than my patients.

Rabia, the young woman whom I diagnosed with leprosy and wound infections would come back every day for wound care. While I dressed her wounds, I learned she had lost her parents in the earthquake. She was caring for her elderly grandfather. Embarrassed, she told me she was attending second grade in the tent city school, even though she was 14, because she had missed so much school.

Zubaida, the stubborn elderly lady who refused to let me give her medicine for her tuberculosis. Each day I would try and convince her she should get treated, if not for herself, then so she would not infect the nine children who lived in the tent with her. Her answer to my final threat was a calm reply that they already were infected!

I saw countless children with scabies, who would get WHO cookies, a bottle of permethrin and instructions to give their parents for boiling their clothes; pregnant women needing prenatal care; young mothers needing advice

on meeting nutritional needs for their children; young men with injuries from trying to rebuild.

Before I knew it, the month had passed. Every day had come and gone like a whirlwind, but my last day was to be an especially eventful one. The tent city school children wanted me to come to their school. Rabia shyly issued me an invitation for tea at her tent after school. Excited to see what was in store, I walked into one of the school tents where I was greeted by a loud chorus, "Welcome Dr. Ayesha." I looked around and smiled at all the children I had gotten to know.

When class was dismissed, I was accompanied to Rabia's tent by no less than the entire class. On the way, we passed the field where the kids played soccer. One pulled out a ball and looked at me eagerly. Why not, I thought to myself as I ran onto the field with the kids chasing me. I'm not sure what the game was that we played. I don't think soccer is supposed to consist of 20 kids running in the same direction after a woman with a ball, but I've never played a more fun game of soccer in my life. Laughing, we walked to Rabia's tent and I was surprised to find that outside her tent and the neighbor's, little white stones spelled out W-E-L-C-O-M-E. The neighbors peeked out and smiled at me as they saw me notice their handiwork.



Calling out hello, I stepped into Rabia's tent and found that in the little space of her tent, she had taken all the dishes she could find, mismatched and broken, and set up a tea service. She had even wrangled up cookies from somewhere. Once I came in and sat down, she introduced me to her grandfather and two of the neighbor's little children who were joining us for tea. Her grandfather welcomed me and we chatted while Rabia carefully measured out the UN rations of tea, milk, and sugar into a pot to make the tea. Soon the chai was ready and while she poured, I thought back over the events of the months, at everything I had done and all I was not able to do; at what I had been able to teach and all I learned; at what I expected and what I had actually gotten. In the end, I decided, it doesn't matter what you're given; only what you make of it. I picked up my cracked, chipped teacup, sitting on the cold mud floor, and took a sip of the sweetest chai ever.

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## Global Goings-On

*Global health news from around campus and the world*

### *The US Commitment to Global Health: Recommendations for the New Administration*

The Institute of Medicine has released a report of its global health aid recommendations for the new administration.

Read it online at:

[www.iom.edu/CMS/3783/51303/60714.aspx](http://www.iom.edu/CMS/3783/51303/60714.aspx)

### *Global Health Education Consortium (GHEC) 2008 Annual Report*

The GHEC 2008 Annual Report is available online at:

[www.globalhealthedu.org/PublicDocs/Annual%20Report\\_2008.pdf](http://www.globalhealthedu.org/PublicDocs/Annual%20Report_2008.pdf)

### *Global Health Career Network*

An online resource for global health employment opportunities is available at:

<http://careers.globalhealth.org/search.cfm>

### *Malaria Vaccine Closer*

Gates, PATH work closer to effective malaria vaccine:

[http://seattlepi.nwsource.com/local/390940\\_malariavax09.html](http://seattlepi.nwsource.com/local/390940_malariavax09.html)

### *GHEC 18<sup>th</sup> Annual Conference*

The GHEC 18th Annual Conference is scheduled for April 3–5, 2009 at the University of Washington in Seattle, Washington. Register online at:

[www.globalhealthedu.org/events/transcend/Pages/Registration.aspx](http://www.globalhealthedu.org/events/transcend/Pages/Registration.aspx)

### *Unite for Sight 6<sup>th</sup> Annual Global Health & Development Conference*

The Unite for Sight 6th Annual Global Health & Development Conference taking place April 18–19, 2009 at Yale University in New Haven, Connecticut. Register at:

[www.uniteforsight.org/conference](http://www.uniteforsight.org/conference)

### *6<sup>th</sup> Family Medicine Global Health Workshop*

The 6th Family Medicine Global Health Workshop is taking place September 10–12, 2009 in Broomfield (Denver), Colorado. Register at:

[www.aafp.org/intl/workshop](http://www.aafp.org/intl/workshop)

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