

Health Sciences Center for Global Health The Global Address

NEW Health Sciences Center for Global Health Launches Web Site



As the Health Sciences Center for Global Health expands its offerings, the new Web site allows us share up-to-date information in one easily accessible location. We hope you will find it informative.

Picture yourself on it

Photographs and stories on international experiences are featured front and center on the site. If you have a great photo and story about your time in a developing country—we want to hear from you. We know that OSU students and faculty are doing fascinating things all around the world and we want to share those stories.

News and Events

News and events is where you will find current happenings. Where to hear distinguished speakers on our campus such as Dr. Patrick Kelley from the Institute of Medicine featured later in this newsletter, new grant opportunities, the archive of *The Global Address*, new global health courses, and spotlights on faculty involved with global health will all be featured here.

Graduate Interdisciplinary Specialization in Global Health (GISGH)

Information and application forms are found at the GISGH link. The Graduate Interdisciplinary Specialization in Global Health is a university-wide program that offers current OSU graduate and professional students advanced educational opportunities in the field of global health. The goal of the GISGH is to help prepare graduates to be active participants in the advancement of global health through academic enrichment, service-learning, and research pertaining to issues of global health. As new courses are added or changes are made to the GISGH program they will be listed here.

Links

This page is the quickest way to connect to all the Health Sciences Colleges, the Office of International Affairs, the Global Health Education Consortium, USAID, Institute of Medicine Global Health Board and other organizations that we think might be useful to a student of global health. If you are aware of a great site please let us know. We want to share the knowledge that already exists in one easy to access location.

The site will grow and evolve as the Center does and we hope that you, our constituents, will play a role in shaping it. Ideas for features, photos, and resources are welcome so let us hear from you.

http://globalhealth.osu.edu/

Inside This Issue

- Q&A with Patrick Kelley, MD, DrPH Malawi to OSU GISGH Perspectives
- My Take Faculty, Staff and Student News



The Health Sciences Center for Global Health sponsored a presentation by Dr. Kelley on campus. We sat down with Dr. Kelley to ask him about global health and OSU.

Q: What role do you see academic institutions such as OSU playing in global health education and training?

A: Academic institutions are at the heart of the natural response of why the U.S. should be committed to global health. Universities are highly multidisciplinary and so is global health. Global health calls on the traditional specialties but also agriculture, engineering, business, law, architecture, etc. To be successful in addressing the needs of global health we need to synergize all the disciplines and universities are the natural place for this to happen.

Q: What topics should we be teaching at our universities?

A: One of the areas that I have a

Q & A with Patrick Kelley, MD, DrPH

personal interest in is violence as a public health issue. We need to stress that global health is more than TB, malaria, and HIV. Care of chronic diseases, injury prevention and mental health treatment are tremendous needs in low-income countries. We also need to focus on strengthening health systems, which ultimately must happen to improve the health outcomes in low- and mid-income countries. Finally, we need to look at workforce issues and capacity building of human resources, not just in healthcare but in finance, informatics, logistics and so on.

Q: The Institute of Medicine of the National Academies recently released The U.S. Commitment to Global Health Recommendations for the New Administration, how does the tone of this report differ from the report released in 1997 titled America's Vital Interest in Global Health: Protecting our People, Enhancing our Economy, and Advancing our International Interest?

A: The report from 1997 highlighted our self-interest while the 2009 report comes from more of a humanitarian place. America has the opportunity to show its commitment as a member of the global community and as a world leader by contributing to improved health around the world. The 2009 recommendations call for the administration to highlight health as a pillar of U.S. foreign policy, create a White House Interagency Committee on Global Health, designate a senior official at the White House at the level of Deputy Assistant to the President for Global Health to chair the Interagency Committee, double annual U.S. commitment to global health between 2008 (\$7.5B) and 2012 (\$15B), and support the World Health Organization but also request a rigorous external review.

Q: If you had the opportunity to make recommendations to the World Health Organization to improve global health, what would you say?

A: I would recommend that we strengthen global health surveillance for environmental, human, and zoonotic infections. Better surveillance would allow us to detect disease spread as early as possible so that we can develop vaccines. Currently, we often don't have good reporting for the areas that are the most critical, India, China, and Africa.

We also need to strengthen response networks and legal mechanisms to build capacity for responding to problems that become recognized. The Food and Agriculture Organization doesn't have the same power to enforce responses as the World Health Organization has.

Patrick Kelley, MD, DrPH is the Director of the Board on Global Health and the Board on African Science Academy Development at the Institute of Medicine of the National Academies. Dr. Kelley served in the U.S. Army for more than 23 years as a physician, residency director, epidemiologist, and program manager. In his last position with the Department of Defense, he founded and directed the presidentially-mandated Department of Defense Global Emerging Infections Surveillance and Response System where he managed approximately \$42 million dollars of emerging infections surveillance, response, training, and capacity-building activities in partnership with numerous elements of the federal government and with health ministries in over 45 developing countries.



Emerging Infections – A Security Issue?

The OSU Medical Heritage Center was the site of Dr. Kelley's October 14 presentation, *Contagion and Global Security: Emerg-ing Infections as a Transnational Security Issue*. He defined emerging infections, as infectious diseases that recently have become more prevalent or threaten to do so. They include infections of plants, animals, and human beings, naturally or intentionally (e.g., caused by terrorism).

He noted that infectious diseases are becoming more frequent. Contributing

factors include changes in the environment, zoonotic factors, human behavior including increased travel, food supply (globalization and mass processing) microbial adaptation, and lack of public health infrastructures.

"Emerging infections are global security issues because they impact travel and business, effect agricultural and aquacultural trade, allow for the international spread of drug resistant organisms, effect military readiness, increase the need for humanitarian assistance, and have the potential of being used in bioterrorism/biological warfare," stated Dr. Kelley.

Malawi to OSU

Malawi Facts

Location: Southeastern Africa, landlocked between Zambia, Tanzania, and Mozambique

Population: 14,268,711

Primary export: Tobacco

GDP - per capita: \$800

Life expectancy at birth: 43

HIV/AIDS - adult prevalence rate: 11.9%

Malawi from The World Factbook, CIA.



Johnstone Kumwenda, MBChB, MSc, FRCP, University of Malawi College of Medicine, visited OSU recently at the invitation of a team from OSU that visited the University of Malawi, College of Medicine this past August. He serves as the undergraduate dean of students, which in Malawi includes lab technology, medical, pharmacy, and allied health students. Dr. Kumwenda met with Dean Robert Brueggemeier and Nicole Kwiek, PhD, from the Department of Pharmacy to discuss how OSU could help the Malawi University pharmacy department with its short term teaching commitments as there is a critical shortage of pharmacy instructors. The College also is seeking help with training of pharmacy teachers so that they can increase the number of pharmacists in the country. Dr. Kumwenda noted that the OSU Department of Pharmacy is "well-known for its teaching qualities.'

The Malawi COM is the only medical school in the country and as such is responsible for ensuring that enough physicians graduate to meet the needs of the country. Wiley W. Souba, MD, ScD, MBA and dean of the OSU College

of Medicine met with Dr. Kumwenda to discuss the issues of improving surgical care and introducing specialist surgical services in Malawi. Deborah Larsen, PhD, and director of the School of Allied Medical Professions shared details of the physical and occupational therapy programs at OSU. The University of Malawi recently created a fouryear Bachelor of Science degree in Physiotherapy and will start enrolling students in 2010. There is a great need in Malawi for PT and OT specialists and they are eager to develop a cadre of therapists. Finally, Dr. Kumwenda met with Larry Schlesinger, MD, and Jesse Kwiek, PhD, in the Division of Infectious Diseases to explore collaboration in tuberculosis research and the possibility of training molecular diagnostic postgraduate students in this area.

Many challenges and obstacles stand between Malawi's healthcare infrastructure needs and its ability to fill them but the Malawi COM is committed and excited about the task ahead of them and the potential role that OSU could play.



Dr. Kumwenda, (center), met with Dean Robert Brueggemeier, PhD (left), and Nicole Kwiek, PhD (right) of the College of Pharmacy.

External Advisory Group Comes to the Health Sciences Center for Global Health (HSCGH)

As part of the review process of the Fogarty Framework grant (R25 training grant from the NIH Fogarty International Center) awarded in 2008, an external advisory group visited the HSCGH on October 6.

Margaret E. Bentley, PhD, UNC Gillings School of Global Public Health University of North Carolina Chapel Hill, James M. Tielsch, PhD, Johns Hopkins Bloomberg School of Public Health, and Ann Marie Kimball, MD, University of Washington met with the deans of the Health Sciences Colleges, graduate students in the Graduate Interdisciplinary Specialization in Global Health program, the faculty liaisons from the HS colleges to the Center, and the Vice Principal of Metro High School, Amy Kennedy. Dr. Steven Gabbe, CEO, OSUMC, hosted a lunch for the group that included William Brustein, PhD, vice provost for Global Strategies and International Affairs, and Center co-directors Daniel Sedmak, MD, and Mary Ellen Wewers, PhD. The group was favorably impressed noting that the "commitment by OSU leadership to your plan was evident throughout the day." Dr. Tielsch further stated, "Congratulations on the progress you've made in developing the global health program at OSU and in securing commitment to this area from the highest level of the University. There is a palpable sense of excitement on campus and at Metro that is inspiring. I look forward to "borrowing" ideas for extending educational activities related to global health to enhance our own program here at Hopkins."

The faculty and staff of the HSCGH wish to acknowledge Deans Robert Brueggemeier, Lonnie King, Stanley Lemeshow, Deb Larsen, Elizabeth Lenz, Melvin Shipp and Wiley Souba for their contributions to the review process. Additionally, we would like to thank the following students for their participation: Anja Brokaw (Nursing), Sara Maguire (Medicine), Cara Whalen (SAMP), Lina Howison (Public Health), Hayley Ashbaugh (Vet Med), and Rebecca Goldberg (Dentistry).

Why did you enroll in the Graduate Interdisciplinary Specialization in Global Health?

We reported on the creation of the Graduate Interdisciplinary Specialization in Global Health (GISGH) in the June 2009 issue of *The Global Address*. The program is designed to provide graduate and professional students the opportunity to gain specific expertise in the unique challenges of health care in the developing world through supplemental coursework in conjunction with their graduate or professional program. Recently, we asked two of the participants in the program to answer the question "Why did you enroll in the GISGH?"



I enrolled because I wanted the opportunity to develop my knowledge and critical thinking skills regarding the issues that affect global health. Even though I have been interested in global health for a long time, and hope to work overseas in the future, my core nurse practitioner classes and clinical experience have yet to provide the time or space

to delve deeply into global issues. So I enrolled in the graduate specialization because I wanted to be deliberate about spending time in graduate school learning about, thinking about, and discussing global health issues with my colleagues.

I am currently enrolled in two classes for the specialization and have found them eye-opening regarding the complexity of current global issues and challenging to my preconceived ideas about what works (and what does not work) in the global arena.

Anja Brokaw, RN 3rd Year Graduate Entry Student in the College of Nursing I lived in Guatemala for one year as part of an internatinal health program. Like so many students who get the chance to experience global health first hand, my life abroad was eye-opening, inspiring, and I would venture to say, a defining chapter in my life. But when I returned home, I found that maintaining a focus on global health was



proving a challenge. Abroad, I was fueled by the immersion; it was inescapable. But once home, my attention returned to the routines of (a very different) daily life. Factor in the demands of medical school, and it's no surprise global health was pushed to the periphery. For me, the Interdisciplinary Specialization in Global Health is the perfect solution for a busy student who still wants to stay connected with health care abroad. Rather than sacrifice one or the other, it has allowed me to integrate my passion for global health with my formal medical education.

Benjamin Rosenfeld 2nd Year Medical Student

My Take: Challenges in International Research



Dr. Norris Turner is new to OSU having joined the university on October 1. She is an assistant professor in the Division of Infectious Diseases in the Department of Internal Medicine and has extensive experience conducting international research in low-income countries, specifically in the area of women's reproductive health and the prevention of sexually transmitted infections.

A former classmate of mine likes to say that completing epidemiological

doctoral work in international settings feels more like getting a PhD in logistics than a PhD in Epidemiology. While public health field work that takes place in less-developed regions is typically just as rigorous in its planned design and methods, operationalization of the research goals often leads to unexpected challenges that can bewilder even the most experienced US investigators.

I was recently involved with planning a randomized clinical trial to be fielded in Madagascar, an island nation in the Indian Ocean off the southeastern coast of Africa. Two-thirds of the population of Madagascar live below the international poverty line of US

by Abigail Norris Turner, MSPH, PhD

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experienced US investigators.

\$1.25 per day. The planned intervention was complex even in a highresource setting: a partially-masked factorial design involving two experimental products (a contraceptive diaphragm and a candidate vaginal microbicide gel) where women were

randomized in unequal numbers into one of four groups (diaphragm plus microbicide gel, diaphragm plus placebo gel. microbicide gel only, or

placebo gel only). We were hoping to demonstrate a reduced incidence of sexually transmitted infections in women receiving one or both experimental products, compared to the control group. The population was also hard to access: female sex workers in five cities around the country. But these challenges were

developed ways to recruit and retain the desired number of hard-to-reach participants. We brainstormed strategies to explain the rationale of the intervention to target women.

with our Malagasy colleagues we

What slowed the planning phase incredibly, however, were the challenges we didn't anticipate. Our formative research showed that

our plans needed both major and minor revisions for our trial to be successful. For example, women were asked to insert their diaphragm and microbicide gel at least 30 minutes before having sex. But while piloting our instruments, we realized that these women don't wear watches, and clocks don't normally hang on

the walls in the impoverished conditions in which they live. So the modified instructions



The capital of Madagascar, Antananarivo.

the ones we knew about in advance. We conducted several pilot studies to demonstrate the acceptability and feasibility of the intended protocols and research methods. Together

told them instead that they should insert the products as many minutes ahead of time "as it takes to cook rice." We had also planned to ask women about their sexual behavior with primary, nonpaying partners (husbands or boyfriends) as distinct from clients, which seemed like a straightforward enough distinction. One woman in a preliminary focus group discussion wanted to know how to classify a recent partner she had, who had originally

been a client but now did not pay her for sex, except that he sometimes bought food for her at the market and had recently paid her child's school fees.

Continues on page 6

My Take: Challenges in International Research Cont. from page 5

At another point we realized that the amount of study products women needed to take home with them, to last the full period of time between study visits, threatened their privacy. Sex workers don't tend to have a place to keep several tubes of gel where it won't cause others (clients, family, other sex workers) to become suspicious and ask unwanted questions. We restructured the visit schedule to allow for more frequent returns to the clinic for product dispensation. Our in-country lab had to rewrite our operating procedure for shipping biological specimens when we realized that dry ice was only available in the capital city Antananarivo, and that the cost to ship dry ice to other cities and then back again with serum samples was prohibitive.

> No international research can happen without real, functional collaborative relationships.

These are only a few of what seemed like thousands of operational challenges to our trial. As with most collaborative research in global health settings, however, answers did exist, but they didn't come from the US researchers with the fancy advanced degrees. Most often they came from the potential participants themselves or from our Malagasy co-investigators, the study clinicians who spent their careers caring for these women. We modified our protocols, pilot tested, then modified again. The original design of our trial - funded by US taxpayers - would have captured data that were carefully collected but of questionable validity.

Although we hear this statement over and over throughout our various training programs, it is hard to internalize the real obstacles in global health research without participating first-hand on a research team. My experience has been that the most highly-trained individuals - sometimes even the people who conceived the research - often struggle most with the modifications required to put the project into the field. Creativity and resourcefulness are critical. And like so many other human experiences, humility, respect, and humor are essential to successful international research endeavors.



Dr. Norris Turner's Malagasy colleagues (L to R, back row): Lucie Razanamiandrisoa, Noro Ravelomanana, Mbolatiana Raharinivo, Noroseheno Ramiandrisoa. (L to R, front row): Oliva Rabozakandraina and Bodo Randrianasolo



Riverbank in Madagascar



Faculty, Staff and Student News

Global Health Panel Discussion

Daniel Sedmak, MD, executive director, Health Sciences Center for Global Health and Lenore Jarvis, fourth-year OSU medical student (pictured right), represented the Center in a panel discussion, *Global Health's Rising Challenges: Emerging Markets, Africa & National Security*, hosted by the Columbus Council on World Affairs October 14. Other panelists were Phil Deschamps, president and CEO, of GSW Worldwide and Dr. Patrick Kelley.

The program was the third and final one in the *Global Health* 2009: Community Conversations education series that was presented by the CCWA and the Cardinal Health Foundation. The OSU Health Sciences Center for Global Health co-sponsored the program as part of its commitment to increase awareness of global health challenges and engage the local community in response to these challenges.



Pathology Faculty Awarded Gates Foundation Grant



Vijay Pancholi, PhD

Vijay Pancholi, PhD, associate professor in the Department of Pathology, has been awarded a <u>Gates Foundation Grand Challenges Explorations</u> grant. Dr. Pancholi was the only recipient in the state of Ohio to receive this funding in the third round and only the second person from Ohio in all three rounds. A total of 262 proposals have been funded to researchers in 30 countries.

Grand Challenges Explorations grants are given to projects that have the potential for breakthrough advances in global health around one of 14 designated global health challenge areas. Dr. Pancholi submitted his proposal under the topic *Create New Vaccines for Diarrhea, HIV, Malaria, Pneumonia, and TB.* His idea is for an improved vaccine for pneumococcal infections, one in which the virulence of live pneumococci is removed allowing it to be used as a powerful vaccinating agent.

Initial grants of \$100,000 are awarded two times a year and successful projects have the opportunity to receive follow-up grants of a \$1 million or more.



IHIG Officer Elections

The 2008-2009 International Health Interest Group (IHIG) held an endof-year celebration/fundraiser in June at Fred Beekman Park to celebrate and fundraise for their summer experiences abroad. President Gee showed his support by attending (pictured here with Sara Maguire, 2008-2009 IHIG co-president).

New officers for the 2009-2010 academic year: Presidents: Christopher Nau and Javed Sayed Treasurer: Christina Durchholz Secretary: Caroline Scacca Publicity Chair: Jennifer Perone Fundraising Chairs: Ryan Donald and Philip Ross Student Organization Liaisons: Leigh Stone and Jiageng Xu



Faculty, Staff and Student News

From Farm to Table

Armando Hoet, DVM, PhD, assistant professor in the Department of Veterinary Preventive Medicine and coordinator of the MPH-VPH program at OSU, took part in a "Farm to Table Study Program" in Uruguay, from October 26 – October 30, 2009. Current MPH-VPH student Annemarie Hoffman and former MPH-VPH/ PhD student Narry Tiao were among the participants.

The study program involved five intensive days of experiential and hands-on learning and visits to 12 establishments across southern Uruguay, including a beef cattle operation, a specialty cheese processor, and a highly sophisticated meat processing plant. This interactive and engaging study program provides participants the opportunity to appreciate the global integration of food systems as well as promote collaborative group leadership through network building opportunities.

The trip will be offered again in October 2010. If you have interest in this international opportunity, please e-mail <u>Dr. Armando Hoet</u> to be included in future information and updates.



"Farm to Table Study Program" is a collaborative effort of the University of Minnesota, The Ohio State University, the Universidad de la Republica in Uruguay, and the Uruguay Ministry of Livestock, Agriculture, and Fishery.

NCI Director Highlights OSU Professor Richard Love, MD

Richard Love, MD, co-investigator on OSU's Fogarty International Center Grant, was highlighted in the October National Cancer Institute (NCI) Bulletin for his work in Bangladesh. The following is an except from the director's update.



Richard Love, MD

NCI Cancer Bulletin (Director's Message)

10/6

At NCI, we clearly recognize cancer as a global health crisis, and one for which the worldwide impact—both personal and economic—is rapidly expanding. It has been estimated that across the globe there will be 12.9 million new cases diagnosed this year, and the worldwide toll is predicted to rise to 27 million new cancer cases and 17 million deaths by the year 2030, unless we take more pressing action. Consider Bangladesh, one of the world's poorest countries, where 162 million people live in an area the size of Iowa. With support from NCI and other organizations, **Dr. Richard Love of Ohio State University** is attempting to break through political and cultural barriers to save women's lives. Dr. Love has worked with the Bangladeshi government to open free breast cancer clinics that treat hundreds of breast cancer cases, almost all of which present in late stages. Read more>

The Global Address

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