

UNIVERSITY *of* WASHINGTON

DEPARTMENT OF GLOBAL HEALTH

ANNUAL REPORT 2012-2013



SCHOOL OF MEDICINE • SCHOOL OF PUBLIC HEALTH

www.globalhealth.washington.edu

The Department of Global Health (DGH) celebrated its sixth year in 2012 and has launched students around the world to take on the challenge of improving health and health equity. The Department, founded in 2007, has been propelled by unprecedented interest in global health among students, faculty, and staff across the entire University. DGH is now the second largest department at UW in terms of research and educational grants and contracts, and is the most interdisciplinary and geographically diverse department on campus. This 2012 Annual Report highlights some of the important milestones that marked the past year.

Our Students: Emerging Leaders in Global Health

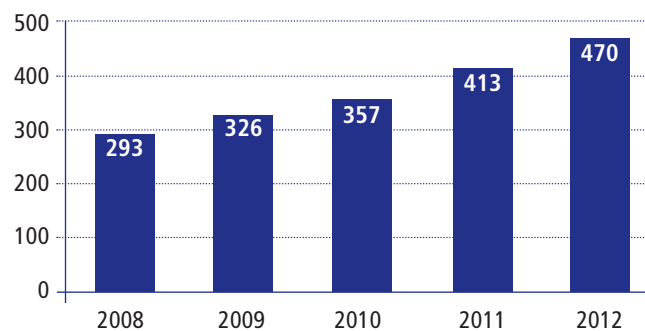
In fall 2012, the Department launched a new doctoral degree in Global Health Metrics and Implementation Science. With the introduction in 2011 of an undergraduate global health minor, the Department now offers programs for all levels of students.

We also have a doctoral program in Pathobiology, which focuses on laboratory science and global health; four different graduate certificates (Global Health, HIV and sexually transmitted infections, Global Health of Women, Adolescents and Children, Global Injury and Violence Prevention) and a Global Health Pathway certificate for medical students. We have five master's in public health tracks (General, Health Metrics and Evaluation, Leadership, Peace Corps, Concurrent Degrees) and post-bachelor and post-graduate fellowship programs in Health Metrics and Evaluation.

Our students came from a wide range of disciplines — anthropology, art, biology, bioengineering, biochemistry, communications, environmental health, geography, history, international studies, languages, law, medicine, microbiology, neurobiology, pharmacy, political science, pre-nursing, psychology, public health, social work, and sociology.

And they came from all over the world, including Argentina, Bolivia, Cambodia, Cameroon, China, Colombia, Haiti, India, Kenya, Malaysia, Mozambique, Nepal, Nigeria, Peru, Sudan, Taiwan, and the United States.

Despite the rising cost of tuition, student interest in global health continues to grow.



Number of students in Department of Global Health education and training programs.

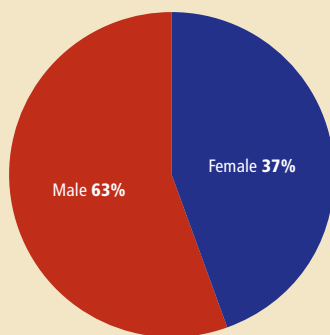


Medical student Fan Lee in Kayunga, Uganda, on a Global Opportunities Health (GO Health) fellowship. Her project: "Preventing Pelvic Inflammatory Disease Through Community Education."

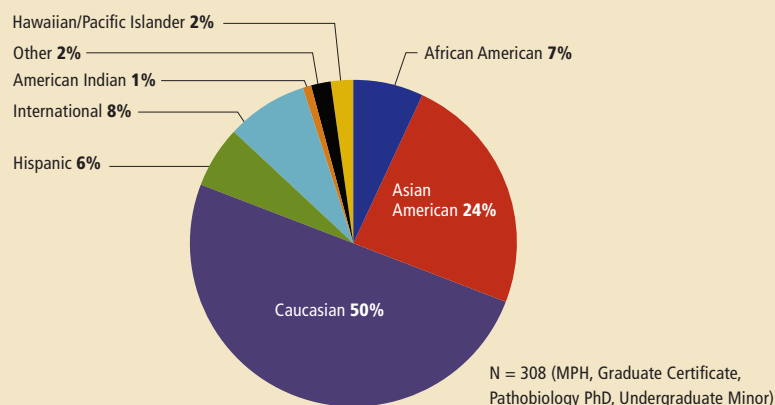
| PROGRAMS | ENROLLMENT |
|---------------------------------------------------------------------|------------|
| PhDs—Pathobiology, Global Health Metrics and Implementation Science | 37 |
| Fellowships—IHME, Fogarty, Pathobiology | 39 |
| Master's in Public Health (Five Tracks) | 72 |
| Graduate Certificates (Four Programs) | 54 |
| Global Health Pathway (Med Students) | 107 |
| Undergraduate Minor | 161 |
| Total | 470 |

Department of Global Health students enrolled Autumn quarter 2012.

OUR STUDENTS



By Gender



By Race/Ethnicity

MPH Program:

In 2012, one-third of the applicants were offered admission and 30 enrolled (about the same as 2010 and 2011). Included in this number are concurrent degree students from the Jackson School of International Studies, the Evans School of Public Affairs, Law, and Bioengineering. We had students from across the United States (including Hawaii) and from Colombia, Sudan, Mozambique, Haiti, Cameroon, Kenya, and Argentina.

Global Health Metrics & Implementation Science PhD Program:

Our new PhD program — the first of its kind in the world — welcomed three students in September 2012. Dr. Peter Cherutich, the head of HIV prevention at the National AIDS/STD Control Programme in Kenya, is our first student in the implementation science track, bringing more than seven years of experience in HIV/AIDS programs at the Ministry of Health in Kenya. Sarah Wulf and David Phillips, formally a research assistant and a data analyst with the Institute for Health Metrics and Evaluation, are pursuing their PhDs in the track.

Pathobiology PhD Program:

Our program — an interdisciplinary program that offers laboratory-based global health research — applies the research tools of immunology, molecular biology, pathology, and genetics to the detection, characterization, treatment, and prevention of cancer, sexually transmitted diseases, and respiratory and parasitic infections. The doctoral program in Pathobiology had 75 students apply in 2012, the most ever; five were accepted and enrolled.

Global Health Pathway Program:

This pathway for UW medical students has had a steady surge of interest — 87 enrolled in 2010, 107 in 2011, and 107 in 2012.

Pathway students are a combination of first-to-fourth year students from across the Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) region.

Graduate Certificate Programs:

The Department offers graduate certificates for currently enrolled students at UW interested in various areas of global health. Of the 54 certificate students, 30 enrolled in the Global Health certificate, 15 in the HIV/STIs certificate, seven in the newly launched certificate for Global Health of Women, Adolescents, and Children (Global WACH), and two for the newly launched certificate on Global Injury and Violence Prevention.

Global Health Undergraduate Minor Program:

The Global Health Undergraduate Minor Program, initiated in January 2011, now has 161 students enrolled. Students come from 28 different majors across the campus. The student leadership committee is working closely with the staff and faculty leaders of the minor to coordinate monthly community connections for undergraduates, including a highly successful global health walking tour of the UW campus held during Dawg Daze — UW's official welcome for new students. The team also holds monthly information sessions about the minor.

Department of Global Health Travel Fellowships — Thomas Francis and Global Health Opportunities (GO Health):

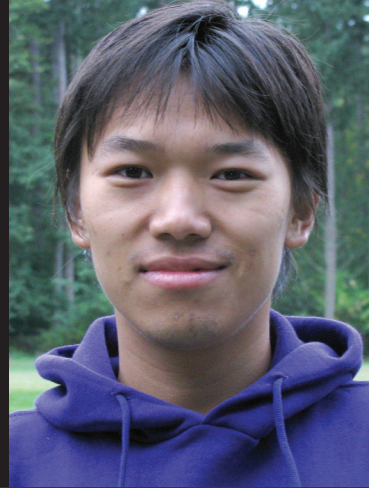
In 2012, the Department offered 21 travel fellowships (averaging \$4,000) — nine for the Thomas Francis Fellowships and 12 for GO Health Fellowships — for diverse of projects. Students traveled to Cambodia, Côte d'Ivoire, Kenya, India, Nepal, Nicaragua, Nigeria, Peru, South Africa, Sudan, Switzerland, Tanzania, Uganda, and Viet Nam. Examples of projects included a study of high blood pressure in Cambodia; development of text messages for women's and child health in Kenya; and improving surgical follow-up for traumatic fractures in Tanzania.

Institute for Health Metrics and Evaluation (IHME) Fellowship Programs:

IHME offers highly competitive post-bachelor and post-graduate fellowships. In 2012, 406 undergraduates applied, 40 were interviewed, and 10 were selected for the post-bachelor fellowship. And 160 graduates applied, 72 interviewed (27 by Skype), and five were offered a post-graduate fellowship. Their backgrounds were in mathematics, biology, public health, economics, political science, biochemistry, and psychology.



Mohamed Ali



Kai Wang



Kyrkia Cowling

Our Alumni

Our alumni are working all over the world and getting jobs with academic institutions, non-profits, and government. We highlight five from various years of graduation:

Mohamed Ali

When a significant winter storm was forecast in 2011, Mohamed Ali quickly set up a meeting with religious and community leaders in a Somali community in Seattle, where he explained the danger of carbon monoxide from indoor grills. In the hours before the storm hit, they organized a rapid communication strategy that included an automatic phone call to thousands of East Africans in King County. The phone message included safety warnings and Ali's phone number as a contact.

By the morning, Ali found himself responding to a barrage of requests from people without electricity. Working with Seattle King County-Public Health, he provided information about shelter options and collaborated with the Abubakr Islamic Center to open a shelter site for families. Ali and the Executive Director of the Islamic Center even rented 4-wheel drive vehicles to deliver hot meals and bring people to warm shelter.

Ali, a refugee from Somalia with a master's degree in global health, has facilitated communications between Public Health and the Somali community over the past several years, and helped establish a Somali Health Board to provide input on effective ways to share important health information with the community.

In 2012, he was recognized by the Federal Emergency Management Agency (FEMA) with a National Community Preparedness Hero award. In 2013 he was honored with the White House's Champion of Change award.

Kai Wang

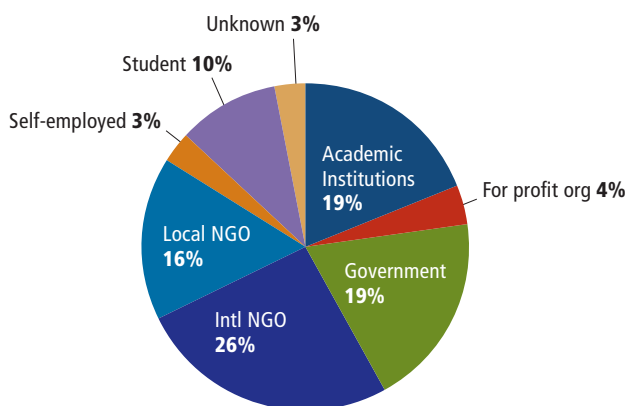
In 2012, MPH grad Kai Wang took a job for Tobacco Free Kids in Washington, D.C., and then returned to his home in China to work for The One Foundation — the first public fundraising foundation from Chinese civil society. The charity was officially launched 1.1.11 by Chinese movie star Jet Li, The move signals the start of a new era for China's charities, experts said.

"It's a cornerstone of China's charity development," Deng Guosheng, associate professor of NGOs at the public policy and management school under Tsinghua University, told The China Daily. "For the first time, we have seen the successful transition of a private charity attached with a public organization into a formal public foundation."

Kyrkia Cowling

Kyrkia Cowling, an IHME post-bachelor fellow in 2008, graduated in 2011 from the MPH track in Health Metrics, then moved to Delhi to do research extracting information from databases and surveys for the nonprofit Public Health Foundation of India. While earning her undergraduate and masters degrees she traveled to Zimbabwe, Ecuador, and Indonesia to learn about and work on health issues. For Cowling, it doesn't matter whether the person in need is from her hometown or lives in an unpronounceable village nine time zones away. She believes that our shared humanity makes everyone's life important.

Where our Graduates Are Getting Jobs



N=141 (MPH and Pathobiology graduates 2008-2012)



Archbishop Desmond Tutu with Zied Mhrisi



Michaela Leslie-Rule (second from right) in Gisenyi, Rwanda, working with a grantee of Nike Foundation's Grassroots Girls Initiative.

Zied Mhrisi

Zied Mhrisi, a doctor from Tunisia, who received his MPH in 2010, is currently the executive director of the Global Network of Researchers on HIV/AIDS in the Middle East and North Africa Region (GNR-MENA), and he recently founded the Tunisian Center for Public Health(TUNCPH). This NGO is hosting distance-learning classes from the Department of Global Health and is providing technical support to public health NGOs in Tunisia.

Mhrisi is also a radio show host at the Tunisian radio station, Express FM. For a year, he produced a daily 30-minute health show that aimed to sensitize the public to different issues, such as obesity, cardiovascular diseases, and lack of physical activity.

He has been active in Tunisian blogosphere (zizoufromdjerba.com / Twitter: @zizoo), and produced podcasts and radio shows that brought the voices of activists to the airwaves under the dictatorship.

Since the revolution, he has worked extensively with international media, think tanks, and politicians analyzing the post-revolution political situation and has been on CNN, 60 Minutes, Al Jazeera, and quoted in The New York Times.

In March 2011, Mhrisi co-founded a successful media start-up "Tunisia Live," the first Tunisian English-language news agency. Tunisia Live is read and watched by more than 100,000 people every month and serves as the main Tunisian news platform on the international level.

In 2012, he was awarded a Desmond Tutu African Leaders fellowship.

Michaela Leslie-Rule

Michaela knew when she began graduate school that her passion was using media and storytelling to describe the impact of public health problems, social innovations, and policy solutions from the perspective of those most affected. She found out quickly that while there were many people to learn from — there was no one to follow.

Immediately after graduating from DGH and the UW Evans School of Public Affairs in 2010, she headed to Zanzibar, to premiere her global health film on gender-based violence. From there, it was to Vienna to present her thesis at the International AIDS Conference and to be named one of the top young investigators. She then traveled back to Tanzania, where she became a consultant for EngenderHealth, partnering with USAID to launch the first national campaign against gender-based-violence.

In less than a year, she was working as a consultant in Nigeria, Kenya, and Uganda. She also did an arts residency in a medium-security prison, where she used her qualitative research, training and performance background to direct a multimedia piece about incarcerated women's experiences — created and performed by the women themselves.

In 2012, she became a full-time consultant based in the Bay Area, and has traveled extensively to capture stories and teach storytelling skills. She has worked and trained with girls in Malawi and Rwanda to become video documentarians, and traveled to India, Uganda, and the Rio Grande to capture stories of reproductive health and human rights innovations. Her website is www.factmemorytestimony.com.

(In case you're wondering, Leslie-Rule always carries her Canon 7D, her MacBook Pro, and a toothbrush — and she never checks baggage).

The Department continued to grow its faculty from 273 by the end of 2011 to 325 by end of September 2013. Our faculty come from 15 of the 16 UW schools and colleges: Arts & Sciences, Business, Built Environments, Dentistry, Education, Engineering, Environment, Graduate, Law, Medicine, Nursing, Pharmacy, Public Affairs, Public Health, and Social Work. And they hail from 34 departments.

Our Faculty: Inspiration and Collaboration Across UW

Our new core faculty in 2012-2013 included:

Ruane Barnabas *Assistant Professor, Allergy and Infectious Diseases, Assistant Professor, Global Health*

HEALTH TOPICS: HIV/AIDS, OTHER INFECTIOUS DISEASES, MATHEMATICAL MODELING.

Sarah Benki-Nugent *Acting Instructor, Global Health*

HEALTH TOPICS: CHILD AND ADOLESCENT HEALTH (INCL. PEDIATRICS), HIV/AIDS.

Donna Denno *Associate Professor, Pediatrics, Associate Professor, Global Health, Adjunct Associate Professor, Health Services.*

(HEALTH TOPICS: CHILD AND ADOLESCENT HEALTH (INCL. PEDIATRICS), DIARRHEAL DISEASES, DISTANCE LEARNING, EDUCATION AND TRAINING, HEALTH SYSTEMS STRENGTHENING AND HUMAN RESOURCES, INFECTIOUS DISEASES, MATERNAL CHILD HEALTH (INCL. REPRODUCTIVE HEALTH).

Timothy DeRouen *Professor Emeritus Oral Health Sciences, Professor Emeritus Biostatistics, Professor Emeritus Global Health.*

HEALTH TOPICS: BIOSTATISTICS, EDUCATION AND TRAINING, EPIDEMIOLOGY, ORAL HEALTH, STDS (OTHER THAN HIV)

Mohammed Forouzanfar *Acting Assistant Professor, Global Health*

HEALTH TOPICS: CANCER, CAUSES OF DEATH, CHRONIC DISEASE (INCL. CARDIOVASCULAR, DIABETES), METRICS AND EVALUATION.

Susan Graham *Assistant Professor, Allergy and Infectious Disease, Assistant Professor, Global Health, Adjunct Assistant Professor, Epidemiology.*

HEALTH TOPICS: DISEASE SURVEILLANCE, HIV/AIDS.

Brandon Guthrie *Acting Instructor, Global Health*

HEALTH TOPICS: HIV/AIDS

Michael Hanlon *Assistant Professor, Global Health*

HEALTH TOPICS: ECONOMICS.

Hideki Higashi *Assistant Professor, Global Health*

HEALTH TOPICS: BURDEN OF DISEASE, HEALTH POLICY, METRICS AND EVALUATION.

Pam Kohler *Acting Assistant Professor, Global Health*

HEALTH TOPICS: HEALTH SYSTEMS STRENGTHENING AND HUMAN RESOURCES, HIV/AIDS, MATERNAL CHILD HEALTH (INCL. REPRODUCTIVE HEALTH).

Santosh Kumar *Lecturer, Global Health*

HEALTH TOPICS: DELIVERY LOGISTICS, ECONOMICS, METRICS AND EVALUATION.

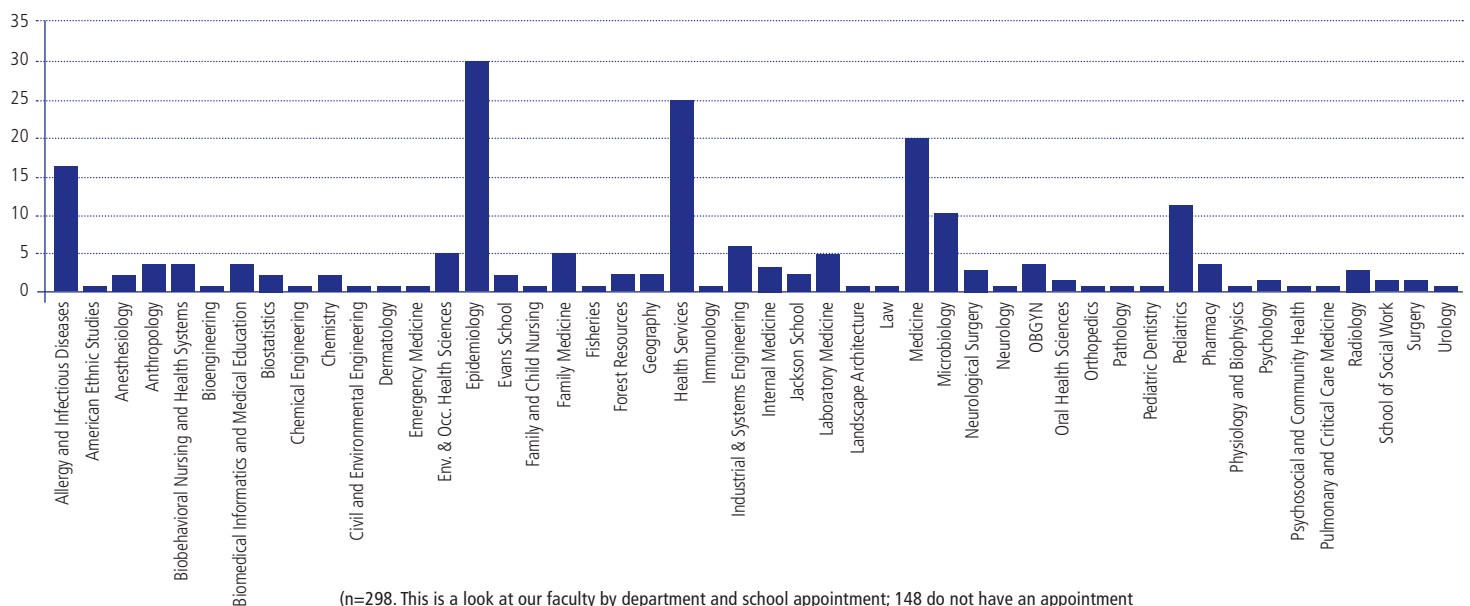
Marie Ng, *Assistant Professor, Global Health*

HEALTH TOPICS: HIV/AIDS, MALARIA, METRICS AND EVALUATION.

Justin Ortiz *Assistant Professor, Global Health*

HEALTH TOPICS: PULMONARY & CRITICAL CARE MEDICINE, HIV/AIDS.

Faculty by Discipline



(n=298. This is a look at our faculty by department and school appointment; 148 do not have an appointment outside the Department of Global Health or School of Public Health and, therefore, are not included.)



King Holmes, Chair of the Department, honored with Gairdner Global Health Award, 2013. (Prof. Christopher Murray and Senior Lecturer Mary Anne Mercer in back)



Stephen Gloyd, Assistant Vice Chair of Education and Curriculum, honored with UW Award of Excellence, 2013 (shown in Côte d' Ivoire).



Judith Wasserheit, Vice Chair, elected to chair Consortium of Universities for Global Health, 2012

Christopher Sanford Associate Professor, Family Medicine, Associate Professor, Global Health

HEALTH TOPICS: INFECTIOUS DISEASES, INJURY, VIOLENCE, TRAUMA AND DOMESTIC VIOLENCE, NEGLECTED DISEASES, TROP. MED. (INCL. PARASITES).

Jennifer Slyker Assistant Professor, Global Health

HEALTH TOPICS: HIV/AIDS, OTHER INFECTIOUS DISEASES, MATERNAL CHILD HEALTH (INCL. REPRODUCTIVE HEALTH).

Stephane Verguet Acting Assistant Professor, Global Health

HEALTH TOPICS: METRICS AND EVALUATION.

Theo Voss Professor, Global Health

HEALTH TOPICS: BURDEN OF DISEASE, COST-EFFECTIVENESS

Faculty Awards and Honors

Connie Celum

POZ Hunter Award, 2012; Dr. Bob Wood Excellence in HIV Prevention Award, 2012.

Abraham Flaxman

Technical Innovation Honor from Massachusetts Institute of Technology, 2012.

Stephen Gloyd

University of Washington Award of Excellence-University Faculty Lecture Award, 2013.

Sen-itiroh Hakomori

Rosalind Kornfeld Award for Lifetime Contribution to Glycobiology, 2012.

King Holmes

Gairdner Global Health Award, 2013; Alexander Fleming Award 2013.

Scott McClelland

Elected to Western Society of Clinical Investigation, 2012.

Andreas Stergachis

Elected to the Institute of Medicine of the National Academies of Science, 2012.

Judd Walson

Seattle Magazine's Top Doctors award "for work on HIV/AIDS, parasitic worm infection, malaria, and health of pregnant women and young children., 2012."

Judith Wasserheit

Elected Chair of the Board, Consortium of Universities for Global Health, 2012.

External Advisory Board Member Awards and Honors

Robert Black The Heritage Award, 2012 (Johns Hopkins University).

Christopher Elias Innovators in Health Award, 2012 (Group Health).

William Foege 2012 Presidential Medal of Freedom— the nation's highest civilian honor.

Quarraisha Abdool Karim Academy of Sciences for the Developing World 2012 Prize for Medical Sciences "for her exceptional and distinguished contributions to HIV prevention and women's health."

Rebecca Richards-Kortum Lemelson MIT Award for Global Innovation (\$100,000 for low-cost technological innovations to improve health care for people in developing nations), 2013.

Guy Palmer Eminent Faculty Award, 2013 (Washington State University).

Peter Piot Hideyo Noguchi Africa Prize for Medical Research, 2013 (from the prime minister of Japan).

Mobile Moms Chosen by Young People Looking for a Cause

The Department of Global Health center, Health Alliance International, which launched a Mobile Moms text messaging service aimed at improving maternal health in Timor-Leste, was the beneficiary of the funds raised by a party July 14, 2012, at McCaw Hall by a group of young people with the Washington Global Health Alliance. Ticket sales were about \$40,000. Faculty involved in this effort included Mary Anne Mercer, Susan Thompson, Beth Elson, Marisa Harrison, and Stephen Gloyd.

'Innovation Happens When You See What's Not Working'

Asst. Prof. Joseph Babigumira profiled by School of Public Health

As a Ugandan physician doing HIV work in Uganda for his master's degree, Joseph Babigumira learned that his driver's sister had gone into septic shock. An unsafe, illegal abortion was to blame. Four days later, the driver's sister was dead.

The health and economic impacts of unsafe abortions later became the basis for Babigumira's University of Washington dissertation on cost-effectiveness of contraception. He is now an assistant professor in the Department of Global Health.

Babigumira says Seattle is a great place to be based for global health work because of the Gates Foundation, PATH, and other organizations. However, he spends about one-third of his time overseas.

"Global health is really about being in the field. Innovation happens when you can see what's going on and what's working and what's not working. When you come back to Seattle, all these lights go on and you have new ideas."



Stories of Collaboration

The Department is collaborating with at least 15 schools across campus. We highlight two high-profile collaborations:

Puente Piedra Project

We are improving health and livable green space in a Peruvian slum, giving residents hope and testing models to improve other poor, urban neighborhoods.

Students from multiple disciplines have worked with residents of a mega-slum in Lima, Peru, called Puente Piedra, through The Puente Piedra Project: Healthy Schools, Healthy Communities. Initial programs in 2006 targeted immediate health care needs, such as sex education at the Pitágoras primary and secondary school, where rates of teen pregnancy and HIV were high. Programs expanded to include asthma, hearing testing, and subsidized eyeglasses, as well as a sewing workshop.

As UW students and faculty worked with the community, they learned that residents had a great desire for green space, so students helped residents of the Lomas de Zapallal community of about 27,000 people plan and transform a barren, sandy hillside into a park with walkways, trees, plants, and shrubs. Technical assistance included designing a system to recycle water from a handwashing

station and pipe it to the park for irrigation. The project won three international design awards in 2012*, including the Social Economic Environmental Design (SEED) Award for excellence in public interest design.

Building upon this success, several additional projects, including a new classroom, a health post, and another green space, have recently been constructed or are underway. The team includes the Department of Global Health, College of Built Environments, and the schools of Medicine, Environmental and Forest Sciences, Social Work, and Public Health. Other partners include Engineers without Borders, Architects without Borders, and the National University of San Marcos in Lima.

** The project also won the 2012 Environmental Design Research Association (EDRA) Great Places Design Award and the 2012 American Society of Landscape Architects (ALSA) Community Service Honor Award.*

Photos: Puente Piedra site (above); Adjunct Assoc. Prof. Lisa Manhart and Assistant Prof. Judd Walson with START (below left); park beginning to bloom in Puente Piedra; UW students working with community members; Adjunct Assistant Prof. Benjamin Spencer lends his expertise in landscape architecture.

START Program

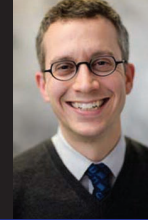
A team of UW students has been getting real-world experience under a global health program called START (Strategic Analysis, Research and Training). Led by Judd Walson, associate professor of global health, and Lisa Manhart, adjunct associate professor in epidemiology and global health, the program features a dozen students who conduct research and analysis under guidance from faculty and staff across disciplines, including the Foster School of Business and the Evans School of Public Affairs.

Projects have covered a number of topics (e.g., child mortality and pneumonia), while partners have ranged from non-profit organizations and industry to universities and government ministries. The program, which offers students generous tuition, operates as a mini consulting firm and has been getting a steady rise in work orders. START is a collaboration between the Department of Global Health and the Bill & Melinda Gates Foundation.





Photos: Nairobi, Kenya; Assoc. Prof. Jared Baeten; Affiliate Assoc. Prof. Rhea Coler working at the Infectious Disease Research Institute.



Research Foundation Strong

UW Study Played Pivotal Role in FDA Approval of HIV Prevention Drug Dr. Jared Baeten said approval would be a milestone for HIV prevention

The U.S. Food and Drug Administration voted July 16, 2012, to approve the use of an anti-retroviral drug for reducing the risk of acquiring HIV.

Following the recommendation of the Antiviral Drugs Advisory Committee made on May 10, the FDA approved the medication generically known as combination emtricitabine/tenofovir disoproxil fumarate (FTC/TDF, branded as Truvada®), for HIV prophylaxis for people who test HIV negative, but have HIV-positive partners. Truvada® is currently prescribed with other HIV drugs for treatment of those infected with the virus.

In evaluating whether to allow Truvada® to be prescribed for HIV prevention purposes for those who are not HIV infected, the FDA reviewed the evidence from two studies – the largest of which was conducted by the University of Washington’s

International Clinical Research Center (ICRC). The study, is known as the Partners PrEP Study (PrEP is short for pre-exposure prophylaxis),

Nine research sites in Kenya and Uganda enrolled 4,758 serodiscordant heterosexual couples, in which one partner had HIV and the other did not, and followed them monthly for up to three years.

The Partners PrEP Study is the largest study of its kind to date and found that FTC/TDF reduced the chances of HIV transmission by 75 percent. Not surprisingly, the protective effect was even higher when the drug was taken regularly, without missing doses. When analyses considered whether participants had detectable levels of the medication in their blood, the protective effect was approximately 90 percent. Results of the study were published July 11, 2012, in The New England Journal of Medicine.

“HIV serodiscordant couples recognized their risk, were highly motivated to take PrEP, and the medication offered high levels of protection for both women and men,” said Dr. Connie Celum, director of the International Clinical Research Center and a UW professor of global health.

Dr. Jared Baeten, co-chair and medical director for the study and an associate professor of global health at UW, said that the approval of Truvada for use in non-infected people would be a milestone for HIV prevention.

“With the ongoing AIDS epidemic in Africa and the steady number of HIV infections in the United States, it is imperative to determine how this effective prevention strategy can be made available to those at greatest risk worldwide,” said Baeten.

Global Burden of Disease Study

The long-awaited Global Burden of Disease, Injuries, and Risk Factors 2010 Study from the Institute for Health Metrics and Evaluation (IHME), involving nearly 500 researchers from 302 institutions in 50 countries was published in The Lancet Dec. 14, 2012. This was the first time the journal had dedicated an entire issue to one study, and it is the largest issue in the journal’s history, combining three weeks of publication into one triple issue. The results received worldwide press coverage.

GBD 2010 looked at the biggest burden of disease for 187 countries from 1990-2010 and found the leading risk factors around the world were high blood pressure, tobacco, alcohol, and indoor household air pollution. The results revealed substantial shifts in health challenges over the past 20 years; i.e, more young adults than children dying, and a rise in noncommunicable diseases (NCDs), such as obesity and diabetes.

Change in leading causes and risks between 1990 and 2010

| 1990 Mean rank (95% UI) | | 2010 Mean rank (95% UI) | | % Change (95% UI) |
|-------------------------|--------------------------------|--------------------------------|--------------|-------------------|
| 1.0 (1-2) | 1 Lower respiratory infections | 1 Ischemic heart disease | 1.0 (1-2) | 29% (22 to 34) |
| 2.0 (1-2) | 2 Diarrheal diseases | 2 Lower respiratory infections | 2.0 (1-3) | -44% (-48 to -39) |
| 3.4 (3-5) | 3 Preterm birth complications | 3 Stroke | 3.2 (2-5) | 19% (5 to 26) |
| 3.8 (3-5) | 4 Ischemic heart disease | 4 Diarrheal diseases | 4.9 (4-8) | -51% (-57 to -45) |
| 5.2 (4-6) | 5 Stroke | 5 HIV/AIDS | 6.6 (4-9) | 354% (293 to 413) |
| 6.3 (5-8) | 6 COPD | 6 Low back pain | 6.7 (3-11) | 43% (34 to 53) |
| 8.0 (6-13) | 7 Malaria | 7 Malaria | 6.7 (3-11) | 21% (-9 to 63) |
| 9.9 (7-13) | 8 Tuberculosis | 8 Preterm birth complications | 8.0 (5-11) | -27% (-37 to -16) |
| 10.2 (7-14) | 9 Protein-energy malnutrition | 9 COPD | 8.1 (5-11) | -2% (-8 to 5) |
| 10.3 (7-15) | 10 Neonatal encephalopathy | 10 Road injury | 8.4 (4-11) | 34% (11 to 63) |
| 11.3 (7-17) | 11 Low back pain | 11 Major depressive disorder | 10.8 (7-14) | 37% (25 to 50) |
| 11.8 (8-15) | 12 Road injury | 12 Neonatal encephalopathy | 13.3 (11-17) | -17% (-30 to -1) |
| 12.9 (8-16) | 13 Congenital anomalies | 13 Tuberculosis | 13.4 (11-17) | -19% (-34 to -6) |
| 15.0 (8-18) | 14 Iron-deficiency anemia | 14 Diabetes | 14.2 (12-16) | 69% (58 to 77) |
| 15.2 (11-18) | 15 Major depressive disorder | 15 Iron-deficiency anemia | 15.2 (11-22) | -3% (-6 to -1) |
| 15.3 (3-36) | 16 Measles | 16 Neonatal sepsis | 15.9 (10-26) | -3% (-25 to 27) |
| 15.4 (8-24) | 17 Neonatal sepsis | 17 Congenital anomalies | 17.3 (14-21) | -28% (-43 to -9) |
| 17.3 (15-19) | 18 Meningitis | 18 Self-harm | 18.8 (15-26) | 24% (0 to 42) |
| 20.0 (17-26) | 19 Self-harm | 19 Falls | 19.7 (16-25) | 37% (20 to 55) |
| 20.7 (18-26) | 20 Drowning | 20 Protein-energy malnutrition | 20.0 (16-26) | -42% (-51 to -33) |
| 21.1 (18-25) | 21 Diabetes | 21 Neck pain | 21.1 (14-28) | 41% (28 to 55) |
| 23.1 (19-28) | 22 Falls | 22 Lung cancer | 21.8 (17-27) | 36% (18 to 47) |
| 24.1 (21-30) | 23 Cirrhosis | 23 Cirrhosis | 23.0 (19-27) | 28% (19 to 36) |
| 25.1 (20-32) | 24 Lung cancer | 24 Other musculoskeletal | 23.1 (19-26) | 50% (43 to 57) |

The New York Times noted that far far more of the world’s population were living into old age and dying from diseases more associated with rich countries, like cancer and heart disease.

Meanwhile, infant mortality has declined by more than half between 1990 and 2010, and malnutrition, the No. 1 risk factor for death and years of life lost in 1990, has fallen to No. 8.”

Prof. Andreas Stergachis and Pharmacy PhD student Catherine Corbell presenting their Namibia project.



Research Foundation Strong Continued

Judy Wasserheit Among Researchers Who Sound Alarm Over Threat of Untreatable Gonorrhea

Researchers are continuing to sound the alarm on the growing threat of multi-drug resistant gonorrhea in the United States, according to a perspective in the Feb. 9 issue of the *New England Journal of Medicine*.

"It is time to sound the alarm," said co-author Wasserheit. "Though there is no evidence yet of treatment failures in the United States, trends in decreased susceptibility coupled with a history of emerging resistance and reported treatment failures in other countries point to a likelihood of failures on the horizon and a need for urgent action."

UW Leads NIH-Funded Consortium to Train Global Health Researchers

The UW is one of five consortia of colleges and universities to receive funds from the National Institutes of Health to help foster the next generation of global health scientists. The Fogarty Global Health Program for Fellows and Scholars is building a network of U.S. academic institutions to provide early career physicians, veterinarians, dentists and scientists with a significant mentored research experience in a developing country. Joseph Zunt, professor in global health and the principal investigator for the UW-led consortium, said the grant will provide new opportunities for training 15-20 U.S. and international doctoral students and post-doctoral trainees each year in international settings.

Mental Health Partnership in Nairobi

The University of Nairobi received a Medical Education Partnership Initiative (MEPI)-linked award focused on research training in mental health. This three-year award, led by Dr. Muthoni Mathai from the University of Nairobi and Dr. Jurgen Unutzer from the University of Washington, builds upon the nearly 30-year research training collaboration between UW and the University of Nairobi. Dr. Deepa Rao is the UW program director.

The University of Nairobi (UON) has two other MEPI awards with the Department of Global Health, one which focuses on improving medical education and retention of doctors in Kenya and another MEPI-linked award for research on maternal, newborn, and child health.

This new award aims to improve mental health research capacity by training University of Nairobi faculty and postgraduates and by establishing a Mental Health Resource Center to support these efforts at UON. UW faculty will be providing in-person training, distance learning courses and mentorship. This exciting interdisciplinary award came out of ongoing conversations among the Department of Global Health's Global Mental Health Group and is one of the first collaborations between the Department of Global Health and the Department of Psychiatry.

Global Health Open House

UW President Michael Young and global health luminary William H. Foege delivered inspirational speeches at the official opening of the student-centered global health space on lower campus in the Harris Hydraulics Building on Jan. 17, 2012.

"In so many ways geography is destiny. Who you interact with and the spaces you have to interact will determine what you focus on, incite you to learn and what you teach to others," President Young said. "I think this space is a marvelous example of something that will deepen an already world-class program."

Guests included staff from PATH, the Bill & Melinda Gates Foundation, Public Health-Seattle King County and the Washington State Department of Health, as well as leaders from across campus. More than 125 guests toured the space on lower campus.



From left to right: Dept. Chair King Holmes, UW President Michael Young, External Advisory Board Chair William H. Foege, Vice Chair Judith Wasserheit and Assoc. Chair of Education and Curriculum Stephen Gloyd.

Dr. William H. Foege, who helped rid the world of smallpox, and is president of our External Advisory Board, offered this inspiration: "So here you are in the Hydraulics Building where students are going to get together with faculty members and they are going to realize the power that they have. And they are going to have new dreams and have new visions. They are going to come up with ideas on how to, in fact, lift up the poverty group and the people who lack health and the people who are disenfranchised so they will have hope and a future to look forward to.

And I'm going to be standing on the sidelines for just as long as I can, shaking my head saying, I never even thought of this."



Prof. Joseph Zunt, the principal investigator for the UW-led consortium to train global health researchers, in Peru.



Students at the Western Regional International Health Conference were inspired to form a circle after the keynote speaker Kavita Ramdas, challenged them to no longer think of who is first in the world: "There is no first place in a globalized world, in a non-linear economy and international system."

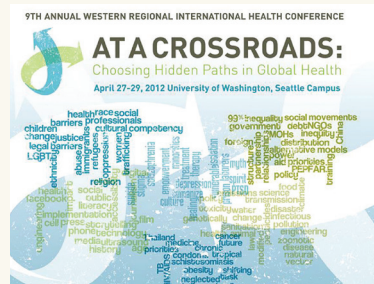
Western Regional International Health Conference: "At a Crossroads"

More than 750 people from 31 universities and 17 states attended the 9th Annual Western Regional International Health Conference, organized by the Department's Global Health Resource Center. The conference, "At a Crossroads: Choosing Hidden Paths in Global Health," was held on the UW campus April 27-29, 2012. One of the highlights of the event was the inspirational keynote talk, "Nothing Less than a Revolution: Why I'm Preoccupied with Inequality, Social Justice and Health," by acclaimed human rights advocate and thought leader Kavita Ramdas, executive director of a newly launched program on social entrepreneurship at Stanford University. Many great plenaries focused on mental health, climate change, trauma and conflict, organization and funding, making the most of your good intentions, working for equity in health and justice in a new Occupy movement, new technology, next challenges, and much much more.

Conference participant Cyan James wrote this for Humansphere:

"As I jumped from session to session at the University of Washington's 9th Annual Western Regional International Health Conference, I found myself persuaded that mental health on a global scale remains both an important and largely invisible problem. One of the themes of the meeting was finding hidden paths to improving global health," she wrote.

See blog posts at www.healthintersections.org.



Western Regional International Health Conference program.



A team of MPH students called "The Handwashers" won the Global Health trivia competition.

Global Health Week a Success

The Global Health Resource Center held Global Health Week May 7-1, 2012, which was well-attended by many students across disciplines and majors. More than a dozen organizations were part of the Futures in Global Health Day - Career Fair. The Working Globally, Locally Career Panel following the Career Fair was moderated by Dr. King Holmes; panelists Adam Taylor from the Global to Local Initiative at King County Public Health, Risho Sapano from Refugee Women's Alliance, Jaime Garcia from Consejo, and Christine Mattfeld from Seattle Public schools, shared their diverse experiences working with immigrant, refugees, and underserved populations in Seattle.

We also had the great opportunity to listen to Dr. Keith P. Klugman's talk on "Influenza and the Pneumococcus: a Deadly Synergism" and Dr. Zulfiqar Bhutta's lecture on "Social Determinants and the Impact of Community Based Approaches on Maternal and Newborn Health." The film screening of "We Were Here" was another success and the discussion led by Dr. Robert Wood, former director of the HIV/AIDS Program of Public Health - Seattle & King County, was eye-opening and highlighted the need to give our attention to the issue of HIV in Seattle.

Our final career development panel, Job Search Tips, was led by Assistant Director of the Career Center at UW Briana Keller with panelists Patricia Breen from UW Medicine, William Smith from Lifelong AIDS Alliance, and Andre Nellams from the Infectious Disease Research Institute.

Global Health Exhibit Featured at 50th Anniversary Celebration of the Seattle Center

UW played a major role in a global health exhibit at the Seattle Center, which showcased the work of more than 30 area organizations at an exhibit at Seattle Center July 1- Aug. 19, 2012.

World Vision donated a mock village that was turned into the Global Health Experience Exhibit in the Next 50 Plaza at Seattle Center featuring the contributions of several UW faculty in the areas of malaria, maternal child health, diabetes, and clean water.

The exhibit culminated in the Pathways to Global Health Activity Tent sponsored by the UW. The tent housed a board game on polio eradication organized by and staffed by UW student volunteers.

There were also several monitors for people to explore more than a dozen 90-second student stories and learn how the students found their pathway to global health. The videos have now been repackaged into a new interactive tool launched in spring 2013, and available on the Department of Global Health website.



Pathways to Global Health video exhibit.



Photo left: UW student Tolu Okitika from Nigeria helps out on the polio eradication game.



Photo right: Seniors Adam Tanaka (left), Christine Scullywest (center), and Roshan Mahoney win Be the Change competition. Photo by Christine Scullywest of UW Daily.

Big DGH Events Continued

Polio Game a Hit

Department of Global Health Vice Chair Judith Wasserheit brought together professional gamers (Harebrained Schemes in Redmond), and staff from the Centers for Disease Control & Prevention, The Gates Foundation, and the Rotary Club to make a polio eradication game for the public a reality during the 50th anniversary of the World’s Fair at Seattle Center.

The game brought great publicity to the crucial fight to eradicate polio in the three remaining countries: Nigeria, Afghanistan, and Pakistan. In January, India declared itself polio free.

The game recreated examples of challenges that global health professionals have faced in distributing the polio vaccine in Pakistan and used a format designed to be played in less than five minutes with little or no prior instruction to the players.

To accomplish this, the game used the familiar 7’ x 7’ grid of a life-size chess board with pieces that move in the familiar patterns of chess and checkers pieces to abstractly simulate the variety of terrain within the countries and transportation options available to the players such as helicopters, trucks, boats, motorcycles, and mules.

Students staffed the game and said kids loved playing it. One family from Scotland played it for an hour. Some people ask, “Why should we care about Pakistan?” Students said they have a great reply — that diseases don’t respect borders. Some recent college graduates who played it said the game was really great at showing how much teamwork is needed.

One of the student organizers, Tolu Okitika from Nigeria, said people asked her a lot of questions about seeing polio firsthand – something she said is pretty commonplace among beggars outside of mosques and in rural areas.

Okitika worked with faculty on assessing the success of the game through a survey of participants and found that 77 percent of those who responded to the survey (n=116) said the game increased their interest in global health.

UW Students Find Spiders with Potential to Combat Malaria

UW seniors Christine Scullywest, Adam Tanaka, and Roshan Mahoney were recently among three first-place finishers in the Washington Global Health Alliance’s Be the Change student competition, thanks to their research proposal of employing the Evarcha culicivora spider to control malaria-spreading mosquitoes. The spiders are natural predators of female mosquitoes, which carry the malaria virus.

Creating a Global Health Community

The Department of Global Health made substantial improvements to its website in 2012. As a result, we have had significantly more visitors and have increased our visibility to search engines. Most of our traffic came from prospective students. The one metric in which our performance suffered is load time, which is largely the result of using shared database hosting through UW IT’s free website hosting service.

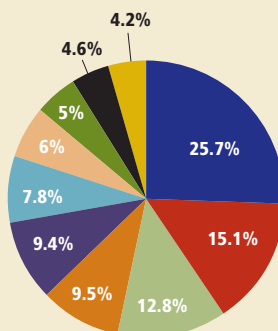
The Department of Global Health website had 88,289 visitors in 2012, 18% more than in 2011. Over 80% of those visitors were located in Washington State. The next most common locations were California, New York, Massachusetts, and India (mostly Karnataka and Delhi), in that order.

Our ranking on Google for global health is quite high – an average placement of 8.3 (i.e., the number of links down when searching for global health). That puts us behind globalhealth.gov, globalhealth.org, and globalhealth.com, but far ahead of any other universities and both the

Clinton and Rockefeller foundations. For comparison, the Center for Disease Control and Prevention in Atlanta also hovers around 8.

Social Media: We have 885 fans on Facebook and 3,657 followers on Twitter.

Popular Search Terms on Global Health Website



- UW Global Health
- Global Health UW
- University of Washington Global Health
- Global Health
- Go Health Kenya University of Washington 2012
- UW Department of Global Health
- Global Health Minor UW
- UW Global Health Minor
- Global Health Minor
- University of Washington Department of Global Health

www.globalhealth.washington.edu