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Six months into my tenure as Executive Director of Global Health Sciences, I am full of excitement for the opportunities that lie ahead. My predecessors, former UCSF Chancellor and GHS Founder Haile Debas, and Sir Richard Feachem, Director of our Global Health Group, have set us on a remarkable course, and I look forward to building on their many accomplishments.

Last year, those accomplishments were many, thanks to the work of the 230 GHS faculty, staff, and students and their collaborators working here in San Francisco, California and in over 50 countries around the world. Our work takes many forms—from helping local leaders improve their ability to manage infectious diseases, to synthesizing evidence to inform international policy and guidelines, to training and educating the next generation of global health practitioners and researchers.

In the past year, our Global Health Group convened private sector health care providers to improve care in 35 countries, and supported Swaziland’s National Malaria Control Program to bring that country even closer to the goal of eliminating malaria through a concerted national effort of testing, treatment, and surveillance. Our Prevention & Public Health Group worked in 19 countries, assisting public health officials to evaluate the effectiveness of different approaches for treating and managing HIV/AIDS.

As I write, the 35 students in our Masters in Global Health Sciences program, the largest class ever, are embarking on the fieldwork experience that is at the very heart of that program. They will work in 22 countries over 12 weeks, gaining knowledge and experience that will help them tackle the daunting global health challenges that lie ahead. John Ziegler, the founding director of our Masters program, deserves special recognition for leading this energetic group of students.

Education is central to the mission of GHS and is my top priority as Executive Director. In September, just a few days after assuming my new position here, I hosted a symposium, “Transforming Health Education Globally,” which looked at progress in the twin efforts to make global health an integral part of interprofessional health education in the US, and to boost support for the
institutions that educate health professionals in other countries. GHS is poised to take on an increasingly important role in this effort, in the same way that UCSF and San Francisco have been renowned for 30 years for the world-class model they developed to combat HIV/AIDS.

Our vision is to make the Bay Area a top global health hub. In the coming year, we will continue to harness the diverse talents and prodigious output of the over 1,200 UCSF faculty, staff, and students who work in global health across the campus today. I will also continue to explore opportunities to partner with UC Berkeley and other University of California campuses, Stanford, and other institutions in the region. At the same time, we will continue to establish strategic partnerships with regional centers of excellence in Africa, Asia, and Latin America.

As we kick off 2012, I have announced two exciting developments that strengthen our leadership in the areas of research and health professions education. Paul Volberding, a longtime professor of medicine here at UCSF, and one of the earliest pioneers in caring for people with AIDS, joined GHS as Director of Research in February, and will lead our efforts to coordinate global health research across the campus and with our Bay Area partners. Paul will also serve as Director of the AIDS Research Institute.

I’ve also appointed Molly Cooke, another long-time faculty member and renowned medical educator, to be GHS’ first Director of Education. She will collaborate with the leaders of our current education and training programs, John Ziegler and Chris Stewart, to expand our leadership in global health education and our own portfolio of programs to address significant unmet needs.

I am enormously proud of the superbly talented people who work at GHS and engage our partners across UCSF and beyond. Collaboration is at the core of our mission. Work in global health should be all about establishing long-term relationships between equal partners, and we are absolutely committed to that approach. We look forward to strengthening our many relationships with global health leaders, researchers, and institutions throughout the world, and to forging new ones in the years ahead. The best is yet to come.

– Jaime Sepulveda, MD, MPH, DrSc
Executive Director
Building Emergency Care Capacity in Tanzania

When Teri Reynolds, a UCSF emergency physician, went to Tanzania to teach ultrasound at Muhimbili National Hospital in Dar es Salaam, she didn’t realize how deeply she would get involved. Reynolds already had an eclectic academic and professional career. She earned a PhD in literature from Columbia University in New York and taught literature and medical humanities for several years before enrolling in medical school at UCSF. After completing her medical degree and residency in Emergency Medicine, she combined a fellowship in emergency ultrasound with the GHS Masters program and did her masters fieldwork at Muhimbili.

Muhimbili National Hospital, in partnership with the Ministry of Health and with support from the Abbott Fund foundation, had just opened the first emergency department in Tanzania and begun planning for Tanzania’s first emergency medicine residency. Reynolds’ fieldwork involved training the Muhimbili providers in bedside ultrasound, an imaging technology that’s attractive in developing countries because it’s inexpensive, portable, and can be used to diagnose a number of common conditions at the bedside. After her fellowship year, with the support of a GHS Burke Family Global Health Faculty Award, Reynolds returned to the site as faculty to complete research on the diagnostic impact of ultrasound and do further ultrasound training and general clinical teaching.

In February 2011, the director of the Muhimbili emergency department died suddenly, and Reynolds began spending more time at the site. UCSF’s emergency department agreed to share her for the next few years, and she began splitting her time between Tanzania and San Francisco. With salary support from the Abbott Fund, she now serves as Muhimbili Emergency Medicine Residency Program Director and coordinates a five-university academic consortium that recruits visiting faculty and provides curriculum to support the residency program. She spent half of 2011 in Dar es Salaam with her husband and seven-year old son and will spend about three-quarters of her time on the project in 2012. Over 25 UCSF emergency medicine faculty, residents, and nurses will have gone to Muhimbili to provide training and mentoring by the end of 2012.

A lot of mutual teaching goes on between the visitors and the Tanzanian providers, Reynolds says. The visiting providers offer an introduction to the culture of emergency medicine practice in a country where it’s a new specialty with no faculty as of yet; the Tanzanians share their expertise in a whole range of pathologies that are rarely seen in the US. Reynolds, for example, has gained experience with the use of bedside ultrasound to diagnose the complications associated with tuberculosis. “We rarely see disseminated TB here in the US, and it’s their bread and butter there,” she says. “Everything I’ve learned about it I was taught in Tanzania.”

The first class of eight Tanzanian residents began their training in the fall of 2010 and are now half way through the three-year program. When the program ends, one of the graduates will become the new emergency residency program director.
After graduating in 2007 from Stanford University, where he majored in Human Biology and Film Studies, Mark Lieber landed his dream job. He got an internship with National Geographic Television and Film that turned into a job as an associate producer. But after four years, he wanted a change. "I needed a break from the TV industry and wanted to do something more meaningful, like work in global health or international human rights," he says.

The Masters in Global Health Sciences program is now helping him pursue that opportunity. He’s learning about the health problems and challenges that people and leaders around the world face and how public health officials address the problems. By studying at UCSF, he hopes to gain experience in global health so that he can work on media campaigns or documentaries on global health issues in the future.

“There are a lot of avenues to making a difference in the world...There are many ways to use media and social marketing to spread awareness and educate people," he says.

For his fieldwork, Lieber will travel to Japan to join in research being conducted by Aimee Sato, a fourth-year medical student at UCSF. They will look at how the earthquake and resulting tsunami that struck Fukushima, Japan, in March 2011, affected children who lived either inside or outside the evacuation zone. The tsunami inundated and disabled the reactors at the Fukushima Daiichi nuclear power plant causing a massive leak of radiation in the worst nuclear event since the Chernobyl disaster of 1986. More than 80,000 people had to evacuate from communities in a 20-kilometer radius of the stricken plant.

Sato and Lieber will ask parents from three different groups to fill out surveys about their children’s experiences and symptoms stemming from the tsunami. One group will consist of children who lived in the Fukushima evacuation zone and relocated to the city of Koriyama, about 50 kilometers away. A second group will be those who already lived in Koriyama. A third, from an area that wasn’t directly affected by the tsunami, will act as a control group.

Lieber will spend about six weeks in Japan, and hopes the research he and Sato are conducting will refine estimates about the extent of mental health problems among children affected by the disaster, and illuminate factors that helped children cope with their experiences (and factors that made coping more difficult). Ultimately, he hopes this information will be useful to the government and to non-governmental organizations in providing recovery assistance to those who still need it.

While he’s there, Lieber plans to shoot a video that sheds light on the health challenges Japanese citizens face one year after the disaster, and that reminds people that much work still needs to be done.

From National Geographic to Fukushima: Film Major Wants to Make a Difference

Mark Lieber
Masters Candidate
Class of 2013

There are a lot of avenues to making a difference in the world...There are many ways to use media and social marketing to spread awareness and educate people.

Mark filming Togolese refugees in Ghana
Education & Training Program Report

Educating and training a new generation of healthcare providers, researchers, and policy experts to be effective global health leaders is at the core of Global Health Sciences’ mission. The trainees who move through our programs create a link between GHS, our colleagues throughout UCSF, and our partners at other UC campuses and around the world. The education program offers several options to enable a diverse group of learners to incorporate global health into their primary discipline.

Masters of Science in Global Health Sciences

Launched in 2008 as the first Masters in Global Health Sciences in the US, this program is aimed at students in professional clinical programs as well as those pursuing careers in health policy, disease prevention and health promotion, research, and public health. It seeks to arm them with the knowledge, experience, and perspective that can help them address health problems affecting the world’s most vulnerable populations.

The centerpiece of the yearlong program is a ten-week, mentored fieldwork experience that allows students to apply their research skills in projects that have a positive impact in underserved communities, both in developing countries and domestically. The fieldwork experience emphasizes study design, project management, and practicalities of field research. (See map of fieldwork sites on p 10.)

Pathways to Discovery in Global Health

This program provides an in-depth global health curriculum and fieldwork opportunities to students enrolled in a UCSF professional school. Many of the students work under the direction of UCSF faculty at our international research sites in Kenya, Uganda, and Tanzania. Others go on to complete masters programs, and several have received prestigious training fellowships (CDC, Fogarty International, Rotary International). From 2006 to 2011, more than 70 UCSF medical students completed the program.

Global Health Clinical Scholars Program

This program is designed for residents, fellows, and post-graduate students throughout UCSF who wish to incorporate global health into their clinical and research training and future careers. Trainees receive clinical release time and salary support from their departments to participate in intensive coursework and a global health project. Medical school residents from 12 specialties have participated: anesthesia, dermatology, family practice, general surgery, medicine, neurology, OB/GYN, pediatrics, psychiatry, orthopedic surgery, radiology, and urology. Students in the schools of nursing, pharmacy, and dentistry also have participated. The program has trained 137 UCSF scholars since 2006.
Global Health Framework Program

From 2008–2011, selected students from UCSF and the UC Berkeley School of Public Health were provided with the opportunity, early in their training, to work as part of multidisciplinary teams tackling health projects in other countries. With funding from the Fogarty International Center at the National Institutes of Health, students in the Framework program spent seminar time doing background work for their projects and learning geographic information system (GIS) technology. Each team of students then provided GIS training to those on the ground at host sites internationally and explored how the technology might be incorporated into international projects. This program trained 40 students who participated in eight projects across five countries.

Complex Humanitarian Emergency (CHE) Simulation Leadership Training

Participants in the CHE program develop leadership and teamwork skills by dealing with a simulated global health emergency involving refugee camps and civil unrest. Experiential learning exercises followed by a weekend training experience help introduce students to the unforeseen events that can arise in a true health emergency. Trainees from various global health programs at UCSF and UC Berkeley assess a simulated situation and develop plans to meet the health needs of the affected population. This program has trained 130 UCSF and UC Berkeley students and trainees since 2008.

Burke Family Global Health Faculty Scholars

The Burke Family Global Health Faculty Award program provides a three-year award totaling $166,500 to junior UCSF faculty engaged in global health activities. The award, created with a $1 million gift from longtime UCSF and GHS supporters Bob and Kathy Burke, provides three years of support for the selected scholars to conduct in-depth field research and be actively involved in GHS education and training programs, including teaching, mentoring students, and supervising research.

Four scholars received awards during 2009–2012: Teri Reynolds, MD, PhD, MS, Assistant Clinical Professor in the Department of Emergency Medicine; Sheri Weiser, MD, MPH, Assistant Adjunct Professor in the Department of Medicine; Susan Meffert, MD, MPH, Forensic Psychiatry Fellow in the Department of Psychiatry; and Lisa Thompson, RN, FNP, MS, PhD, Assistant Professor in the Department of Family Health Care, School of Nursing.

Going Forward

As GHS grows, we strive to provide expanded education and training opportunities to meet the wide range of education needs. We are exploring the development of a “designated emphasis” in Global Health within selected UCSF PhD programs and a possible joint PhD in Global Health with partners at UC Berkeley. We are establishing a GHS alumni association to offer professional and networking services to our graduates and trainees. We also hope to begin distance-learning programs next year that offer coursework and training to a wider national and international audience.

Students respond to a simulated global health emergency
A cornerstone of the Masters in Global Health Sciences program is the fieldwork project, which provides students the opportunity to explore a health interest area in depth.

This map shows the 32 countries in which Masters students have conducted (or are conducting, for those graduating in 2012) fieldwork since the beginning of the Masters program in 2008.

(Some students’ projects include work in multiple countries.)
The Global Health Group
Translating evidence into action

Mission Possible: Eliminate Malaria from Swaziland by 2015

Simon Kunene’s cell phone doesn’t ring nearly as often as it used to, and that’s a good thing. Kunene is the manager of the National Malaria Control Program of Swaziland, and is leading the effort to make that southern African nation the first in sub-Saharan Africa to eliminate malaria. As part of a cutting-edge surveillance program, each time someone in Swaziland receives a confirmed diagnosis of malaria, a text message is sent from the health center to the cell phones of key program officials, including Kunene. This is just part of a sophisticated campaign that combines high-tech tools, like GPS mapping and active case detection, with the in-person work of following up at the home of every individual with confirmed malaria.

Malaria has bedeviled Swaziland for as long as people can remember. In 1946 alone, the country suffered from 50,000 cases, and nearly 60% of all children under 12 years of age were infected with malaria parasites. In recent years, these numbers have plummeted as a result of a coordinated effort to control the disease’s spread. Based on this success, the Swazi government made the decision in 2008 to shift its strategy from controlling malaria, to eliminating it. Swaziland is now on the verge of achieving that goal: the country is actively working to achieve elimination by 2015.

But taking this next step to eliminate malaria is actually a huge leap that many other countries struggle to negotiate. “When the battle is almost won, there’s this dangerous moment when you haven’t quite beaten the enemy and you must stay on the offensive,” says Sir Richard Feachem, Director of the Global Health Group. It takes just one infected person who fails to take medication to suppress their malaria-causing parasites to be bitten by a mosquito, to spread the disease to others.

The GHG’s Malaria Elimination Initiative works with the national malaria programs of fifteen countries to help them avoid these pitfalls and accomplish their goal of wiping out malaria.

The GHG has been involved in Swaziland since 2008 when it was asked by the national malaria program to provide technical assistance to help the country move to the elimination phase. Allison Phillips, GHG Malaria Elimination Initiative deputy lead, helped Swazi officials put together a proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria. The Fund awarded Swaziland a $14 million grant to mount a campaign to wipe out malaria by 2015—the first such grant to a country in the region.

The grant allowed Kunene to hire new field agents, GIS and information technology specialists, malaria prevention educators, and case managers. The GHG also funded an analyst to work with the national program on a daily basis. With advice from a panel
of experts convened by the GHG, Kunene set up a sophisticated active surveillance process. It works like this: when a person arrives at a health clinic with symptoms of malaria, they are given a rapid diagnostic test, which provides immediate results. If they test positive for malaria, their case is quickly reported to a hotline, triggering SMS calls to the cell phones of Kunene and his colleagues. The malarious individual is interviewed to determine where they live and where they may have traveled recently. Finally, within a week, fieldworkers visit the individual’s home, proactively testing all family members and neighbors living within a one-kilometer radius. Any additional individuals who test positive for malaria are immediately taken to a health facility for treatment.

The GHG is currently working with Swaziland to conduct novel operational research that will help improve the country’s active case detection program, and address issues of malaria being imported from neighboring countries.

The key now, according to Kunene, is applying the new technology to allocate resources where they’re needed most, and closely tracking cross-border traffic with Mozambique: many Swazi and Mozambiquan laborers cross the border regularly for work, bringing malaria into the country with them. “I think we are on course,” Kunene says.

The experts who give out the annual Healthcare Engagement Strategy awards think so too: earlier this year they named Swaziland the winner of the 2012 Life Changer Award for turning the tide on malaria.
Doctor from Mali Trains at UCSF to Save Children Back Home

To Kadiatou (Kadi) Koita, the biggest health problem in Mali, the west African country where she lives and works as a doctor, is the high incidence of malaria, especially among children. Malaria is the leading cause of death of children under five, killing 2,300 young children in 2010. That must change, Koita says, and she plans to help make it happen.

Koita received her medical degree from the University of Bamako in 2006 and has worked as a volunteer physician at the Gabriel Touré Hospital in Bamako and in a program aimed at preventing malaria and diarrhea in rural parts of the country. However, she wanted to learn more about public health strategies for preventing malaria.

“I wanted to get more training in models of disease prevention in a program focused on underserved populations,” says Koita. Her search led her to the Masters in Global Health Sciences program at UCSF where she is now a student. “I hope to learn about strategies to better initiate prevention measures that will work toward the elimination of malaria,” Koita says.

This March, Koita headed to Swaziland to conduct fieldwork for her masters. She is working with the Global Health Group and Swazi health officials on the ambitious effort to eliminate malaria in the country. (See “Mission Possible” p 12.) Koita’s research focuses on how malaria is imported into Swaziland from other countries, as frequent migration from neighboring malarious countries is the main obstacle to eliminating malaria in Swaziland by 2015. She will interview malaria control program officers about their work, and she will act as a disease detective, talking to migrant laborers who may carry malaria parasites with them as they travel back and forth between Swaziland and neighboring Mozambique.

“I will interview them to find out if they are part of a broader social network that may be at risk,” she says. “I’ll find out their travel patterns and figure out what strategies can be used to reach out to them.”

After she graduates from UCSF in August, Koita plans to bring her experiences back to Mali, where she is optimistic that malaria can eventually be halted. “Mali is making a lot of progress,” she says. “There’s a long way to go but one day we can get there.”
The Global Health Group (GHG) is an action tank dedicated to advancing practical, action-oriented solutions to address critical global health challenges, influence real-time policy debates and decisions, and improve the health of people around the world. During 2011, we expanded the work of our three core initiatives aimed at eliminating malaria, strengthening health systems, and translating evidence into policy.

**Malaria Elimination Initiative**

Through an ongoing program of research and in-country support, the GHG provides evidence-based guidance and support to 36 countries that are working to eliminate malaria in the next five to 25 years. In 2011, the GHG worked with a growing network of partners to research the best ways to eliminate malaria, synthesize the evidence, and support elimination efforts at global, regional, and country levels:

- **Provided ongoing management support and technical expertise** to bolster efforts by countries in the Asia Pacific (Solomon Islands and Vanuatu) and southern Africa (Namibia, South Africa, and Swaziland) to develop, finance, and implement national elimination plans. We intensified support for Swaziland (see p 12), supporting its goal to become the first country in sub-Saharan Africa to eliminate malaria.

- **Supported the activities of 11 countries in the Asia Pacific Malaria Elimination Network (APMEN)** that are collaborating and sharing lessons in the effort to wipe out malaria in the region. One new initiative begun last year awards capacity-building fellowships and small operational research grants.

- **Conducted comprehensive case studies** that identify key strategies for eliminating malaria in Bhutan and Sri Lanka. These studies will be published as part of a joint series with the World Health Organization, and will be shared with countries to inform their elimination strategies.

- **Secured funding** from the Bill & Melinda Gates Foundation to launch an operational research program that explores how active surveillance systems can be used to help countries pinpoint malaria cases, and prevent its re-introduction through migration once the disease has been eliminated in an area.

- **Published a global Atlas of Malaria-Eliminating Countries** and a companion Atlas of the Asia Pacific Malaria Elimination Network. Both Atlases show the geographic distribution of malaria today in countries that are closest to elimination, and were produced in partnership with the Malaria Atlas Project (MAP).

- **Launched new research** on the economics and financing of malaria elimination to better understand the costs and benefits of eliminating malaria and preventing its reintroduction.

**Health Systems Initiative**

The GHG’s Health Systems Initiative works to advance understanding of the scope and potential of private-sector healthcare services in developing countries. Because of the primacy of these services in developing countries, especially for the poorest populations, the private sector is a crucial focus for efforts to strengthen health systems.

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*Attendees Nikile Siamwiza, Franchise Manager of Marie Stopes International (MSI), Zambia; Manty Tarawalli, Franchise Manager of MSI Sierra Leone; and Cynthia Eldridge, Head of Social Franchising for MSI at the First Global Conference on Social Franchising, hosted by the GHG in November 2011, in Kenya. Social franchising is growing in popularity as a method to scale up access to clinical health services in developing countries. This conference marked the first time that social franchise implementers from around the world had the opportunity to meet in person, along with key government, donor, NGO, and academic stakeholders. Over 165 participants attended from 35 countries.*
In 2011, the GHG’s Health Systems Initiative:

- **Collaborated with Population Services International (PSI) in Myanmar on a three-year study to measure the scale, equity, quality, and cost-effectiveness of the Sun Quality Health social franchise.**

- **Published the third annual *Clinical Social Franchising Compendium*—an overview of the 50 social franchises around the world, describing new innovations in financing, partnerships, quality-assurance systems, and involvement of community health workers.**

- **Conducted site-based assessments** to document how social franchises assure the provision of quality services.

- **Initiated research** among informal and formal healthcare providers to identify barriers to widespread use of rapid diagnostic tests (RDTs) for malaria in Nigeria’s private sector.

- **Conducted a systematic review** of comparative health outcomes in public versus private healthcare settings in low- and middle-income countries and completed a systematic review on the role of informal providers in mixed health systems.

- **Organized and hosted the First Global Conference on Social Franchising** in Mombasa, Kenya, bringing together 165 franchise program managers, implementers, donors, and policy makers from around the world.

**Evidence to Policy Initiative**

The GHG’s Evidence to Policy Initiative (E2Pi) works to narrow the gap between evidence and policy in global health, creating the tools and information that policymakers need to make informed decisions. The GHG analyzes and synthesizes evidence on topics including maternal, newborn, and child health; malaria; aid effectiveness and global-health financing; and the evidence-to-policy process. The GHG’s work on global health financing is conducted in collaboration with SEEK Development, a consulting firm in Berlin.

In 2011, the GHG’s E2Pi:

- **Published a series of country briefs and a major report** on the health and economic benefits of sustaining malaria control efforts in countries that have successfully reduced the malaria burden. These analyses, available at www.MaintainTheGains.org, were conducted in collaboration with the African Leaders Malaria Alliance and the Clinton Health Access Initiative.

- **Co-authored a major new report**, published by the Partnership for Maternal, Newborn and Child Health, outlining ways to restructure global aid to accelerate progress towards the maternal and child health Millennium Development Goals.

- **Published a third European country “donor profile”** focusing on France, examining its political system, legislative process, actors and institutions, and summarizing its global health strategies and funding commitments.

- **Contributed a commissioned editorial**, “Evidence-based policymaking in global health—the payoffs and pitfalls,” to the journal *Evidence-Based Medicine*, and presented its key themes at the Oxford University/BMJ conference, Evidence 2011.

**Going Forward**

In the coming year, the GHG will:

- **Launch new partnerships** with the University of Namibia, the Swaziland Ministry of Health, and others to strengthen malaria surveillance, identify malaria hot spots, and investigate ways to eliminate hot spots.

- **Expand research** on ways of measuring quality, access, and cost-effectiveness of social franchises globally.

- **Launch a new fellowship** with PricewaterhouseCoopers to study public-private integrated partnerships around the world.

- **Launch a new web platform** that profiles and critiques innovative multilateral financing institutions, including the Global Fund and GAVI.
Creating a New Model for Preventing Disease in Injection-Drug Users

It’s 4 p.m., and people are gathering outside the entrance to the UCSF-Tenderloin Clinical Research Center on Market Street. A few feet away, a dozen chess players are moving pieces and smacking timers at a row of curbside tables. At 4:30, the center’s doors are thrown open and a dozen young men and women, some leading dogs on leashes, trudge up the steps.

The weekly Wednesday gathering of the UFO study is underway. The acronym stands for “You Find Out,” and the study provides an opportunity for injection drug users under the age of 30 to get tested and learn if they’re infected with the hepatitis C or HIV. It also gets them off the streets for a few hours to a safe, friendly place where they can help themselves to servings of stewed chicken, beans, and cupcakes, and pick through baskets of free clothing.

The study is part of an international research project called Inc3—the International Collaboration of Incident HIV and HCV in Injecting Cohorts—led by Kimberly Page, an epidemiologist, UCSF Professor in Residence, and faculty member in GHS’ Prevention & Public Health Group. The Inc3 project studies users of injection drugs in Australia, Canada, the Netherlands, and the US in the hope of developing new prevention and treatment approaches.

Researchers are merging data on up to 6,000 people from nine international prospective studies. “We want to figure out how to prevent people from becoming infected with hepatitis and HIV,” Page says. They’re also trying to understand why some people get rid of hepatitis C infections on their own, without drugs, as a way to gain insights that can be applied to the development of vaccines and new therapies.

Hepatitis C is an enormous global health problem with an estimated 170 million to 200 million people infected around the world, and 3 million to 5 million people infected in the US. The disease is spread largely by direct blood-to-blood contact. The most common means of transmission is from reusing infected needles and, to a lesser extent, from the other paraphernalia needle users employ to prepare their injections. Sexual transmission is rare.

Because people can become infected and not develop symptoms for years, the hepatitis C epidemic is largely invisible. People sharing needles spread the disease without knowing they have it. That’s one reason it has become a bigger killer than AIDS in the US, and more people are infected with the hepatitis C virus than HIV, according to a recent CDC report.

In San Francisco, about 40 percent of people using heroin or other injected drugs are infected with hepatitis C. Among those who are not infected, about 25 percent will become infected within a year. At the Tenderloin site, researchers use sophisticated new methods to detect the virus and work to get people referred into care, social services, and substance abuse treatment. “We have to try new approaches, like providing people housing, as an avenue to prevention,” Page says.

Because the people being served and studied in the Tenderloin face some of the same difficulties and challenges as people with hepatitis C elsewhere in the world—poverty, homelessness, the stigma of drug abuse—Page believes the lessons learned can have an impact globally. Working with the NIH, she is starting a clinical trial of a new vaccine aimed at preventing infection. The trial should begin this year and will enroll 350 active drug users in San Francisco and Baltimore.

“Working in the Tenderloin, we have our own high-risk, ‘developing-country’ model,” Page says. “If it works here, it could be the first step in a real global prevention effort.”
What's the most effective way to prevent transmission of HIV from a mother to her fetus or newborn child? Should HIV-infected people whose weakened immune systems put them at risk for developing cryptococcal meningitis take medications to prevent it? Can antiretroviral medications prevent transmission of HIV to uninfected sexual partners?

Providing accurate answers to questions like these, based on a meticulous examination of the evidence, is essential to ensuring that people get the most effective, evidence-based care and treatment for HIV/AIDS. That's the mission of the Cochrane Review Group on HIV/AIDS, part of Global Health Sciences’ Prevention & Public Health Group. The review group, along with its affiliate in South Africa, is part of the Cochrane Collaboration, an international network of researchers in more than 100 countries who have joined together to critically assess the state of available evidence on thousands of research questions in healthcare. Cochrane reviews are widely accepted as the “gold standard”—the most definitive analyses of health research.

Since 1997, the UCSF group has researched and published a total of 87 systematic reviews assessing the benefits—or lack thereof—of a wide range of approaches to preventing, treating, and managing HIV/AIDS. Many of these reviews have led directly to official guidelines from the World Health Organization (WHO). Governments and doctors the world over use the evidence presented in Cochrane reviews and WHO guidelines to help them decide how and when to treat patients, to mount public health campaigns, and to prioritize the resources they have to fight the infection and its related conditions.

“This has become the backbone,” says Rachel Baggaley, medical officer at WHO’s HIV testing, counseling, and service delivery unit. “We can no longer make a recommendation without systematically reviewing and assessing the published literature.” Baggaley is in almost constant communication with George Rutherford and Gail Kennedy, the leaders of the UCSF Cochrane team. “They are absolutely fabulous, hugely respected in this field and very professional,” Baggaley says.

To produce these reviews, the Cochrane team at GHS, with help from colleagues around the world, examine all relevant studies on a particular topic, regardless of language. They evaluate the quality of the research, and may recalculate the data from multiple studies to reach firmer conclusions than would be possible from the results of any individual study.

One of the group’s most recent reviews assessed studies that looked at the benefit of giving antiretroviral drugs to people who have HIV infection, but still have fairly normal levels of immune cells, and have an uninfected sexual partner. The group concluded that providing medications to the infected person would greatly reduce the chance that HIV would be passed to his or her partner. New WHO guidelines on this topic are expected in the first half of 2012.
Prevention & Public Health Group Program Report

Knowledge empowers. When the leaders of a country’s health ministry can use scientific methods and tools to gain a clear understanding of their people’s health needs, they can design prevention and treatment programs that are both effective and appropriate. The Prevention & Public Health Group (PPHG) provides training and technical assistance to public health leaders, researchers in the field, and healthcare providers in countries with limited resources. PPHG also conducts prevention research, writes systematic reviews of studies that evaluate the effectiveness of HIV/AIDS interventions, and helps to develop international prevention and treatment guidelines based on these evidence reviews.

In 2011, more than 70 PPHG faculty and senior research staff worked with community partners, health ministries, universities and other key agencies in 19 countries, helping public health leaders develop their capacity to conduct and analyze research and assess national health needs. PPHG trains physicians and other public health scientists to conduct epidemiologic, clinical, and economic research and assist them in evaluating data to inform their development of health programs and policy.

Supporting Capacity Development Through Technical Assistance, Education, and Training

We provide technical support and conduct trainings in numerous countries, as well as at UCSF, to enhance the ability of health ministries, non-government organizations, and university researchers to design research projects, gather data on the incidence of diseases, and evaluate the outcome of intervention and program efforts. Some examples from 2011:

• **Technical Assistance:** We helped Namibia and Tanzania develop national plans for HIV/AIDS monitoring and evaluation. We assisted Dominican Republic leaders in assessing changes in that country’s HIV epidemic after thousands of migrants arrived following the 2010 earthquake in Haiti. We worked with officials in Rwanda, Tanzania and Ukraine to “triangulate” HIV/AIDS data, providing them with a detailed picture of each country’s epidemic, as well as the skills and tools to perform these analyses on their own.

• **Education and Training:** Last year, we held workshops in evaluation methods for participants from Eastern Europe and Central Asia, and then helped them develop evaluation proposals for use in their own countries. We also developed and led “Monitoring and Evaluation 101” and “Monitoring and Evaluation 201” courses for Ugandan health leaders working on HIV prevention. We offer many of our courses in Portuguese, Spanish, and other languages.

Our International Traineeships in AIDS Prevention Studies (I-TAPS) program, begun in 1988, now has more than 200 alumni from 46 low- and middle-income countries. In 2011, 18 doctors, nurses, epidemiologists, and other public health professionals from 11 countries came to UCSF to take part in scientific writing or research methods courses. Our faculty teach biostatistics, epidemiology, research protocol development, ethics, and other topics. After participants return home and develop research projects, faculty continue to provide technical support and guidance.

Developing and Testing New Research Methods

To reduce or prevent the spread of infectious disease, it’s important to have a specific and detailed understanding about who is at risk and how a disease is being transmitted. With HIV/AIDS, that insight can be hard to attain. Some people feel too afraid or stigmatized to step...
forward or be surveyed—in part because some government leaders deny their country even has high-risk groups such as men who have sex with men, or injection drug users. We work with public health researchers to develop new ways of learning about and measuring groups of people at high risk for HIV who might otherwise be invisible.

- **Using Word-of-Mouth:** PPHG worked with health officials in the Dominican Republic, Ghana, Kenya, Mozambique, Namibia, and Tanzania to find people who belong to particular high-risk sub-groups and ask them to refer others via word-of-mouth, a technique known as “respondent-driven sampling.” This approach, which is analyzed using complex mathematical modeling, is helping to document the existence of hidden populations.

- **Tracking Sexual Behavior:** In Zambia, some rural women who raise and sell vegetables may exchange sex for help or money to support their families. Since these women don’t think of themselves as sex workers, they may not recognize their risk of becoming infected with HIV. Many of their husbands are polygamous, but also may not recognize the increased risk that comes from having multiple sex partners. PPHG worked with local organizations to design a study that would gather data about the women, their partners and their sexual behavior. Zambian researchers did the data collection. A similar project will begin in 2012 in Côte d’Ivoire.

**Continuing Research Projects**
PPHG is also involved in a number of ongoing research projects in partnership with other institutions.

- **Valley Fever:** PPHG is working with the California Department of Public Health, the University of Arizona, and other University of California campuses, to understand the epidemiology and prevention of coccidioidomycosis, a fungal disease that occurs in California, Arizona, Texas, and parts of Mexico. The fungus can cause flu-like symptoms and respiratory problems that have been dubbed “Valley Fever.” PPHG has also led a consortium to develop a vaccine for coccidioidomycosis.

- **Risky Sex:** PPHG helped Cambodia’s National Centre for HIV/AIDS Dermatology and STDs (NCHADS) conduct the Young Women’s Health Study, a long-term research project that interviewed young Cambodian women about their sexual health and drug use and followed them over time. The study’s biggest finding, according to its principal investigator, PPHG’s Kimberly Page, is that drug use by the women is leading to risky sexual behavior, increasing their risk for HIV and other infections.

**Developing Systematic Reviews and Evidence-Based Guidelines**
A team of international researchers, convened and led by PPHG’s Cochrane HIV/AIDS group, conducts systematic reviews of published research to assess the state of evidence that underlies various treatments and interventions. (See “Putting the Evidence in Evidence-Based,” p 18.) Last year, the group published 14 new, and three updated, systematic reviews and helped WHO develop worldwide guidelines on the prevention, diagnosis, and treatment of cryptococcosis, a deadly opportunistic infection people living with HIV commonly contract.

**Going Forward**
PPHG has grown steadily in the past few years. In addition to our current activities, which will continue, we are developing some new activities for 2012 and beyond. These include the following:

- New faculty members with expertise in neglected tropical diseases, tuberculosis, and hepatitis B and C will expand our research in these areas.

- We will expand our research in HIV/AIDS, influenza, sexually transmitted infections, tuberculosis, coccidioidomycosis, and issues relevant to maternal and child survival.

- We are developing a distance-learning-based curriculum focused on advanced epidemiologic methods, for working public health professionals from low- and middle-income countries.
Cross-Campus Initiatives Program Report

Global Health Sciences works with partners across UCSF and around the world to develop programs, resources, and research to help individuals, institutions, and organizations tackle global health challenges.

Building Health Professions Education through Academic Partnership in Tanzania

One of the original motivations for creating GHS in 2003 was to promote UCSF’s participation in boosting the size, capacity, and leadership of the global health workforce. At the time there were few viable models for effective and equitable partnerships between universities in resource-rich and resource-poor countries. In 2005, UCSF and Muhimbili University of Health and Allied Sciences (MUHAS) began an institutional partnership that enables each to share their expertise in educating health professionals, administering and conducting research, and providing clinical services.

In 2008, GHS and MUHAS received a $7.5 million grant from the Bill & Melinda Gates Foundation to explore strategies to address the critical shortage of well-trained health workers in Africa. They created the Academic Learning Project (ALP) to increase the number of health professionals competent to meet the health needs of their people. The partnership is jointly directed by UCSF’s Sarah Macfarlane, PhD, MSc, and MUHAS’ Ephata Kaaya, MD, PhD. In 2011, ALP’s third and final year, the partnership accomplished the following:

• A multidisciplinary team of UCSF educators worked with MUHAS colleagues who completed the revision of all undergraduate curricula for students wishing to enter MUHAS to become doctors, dentists, nurses, pharmacists, environmental and public health specialists, and allied health scientists. The new curricula, using competencies relevant to Tanzania, was approved by the Tanzanian Commission for Universities, and the MUHAS schools began using it in October 2011.

• A newly established inter-disciplinary group of health professions educators at MUHAS led the first formal faculty development workshops to train faculty to assess, revise, and implement curricula.

• MUHAS developed a research agenda aimed at harnessing faculty expertise to address gaps in knowledge about health conditions common in Tanzania.

• Working with UCSF research administrators, MUHAS reviewed its methods for administering research and established three professional units to support faculty conducting their research.

• Researchers from MUHAS and UCSF developed a new tool to help policy makers make realistic plans to increase the quantity and quality of doctors and other health professionals in Tanzania.

• ALP conducted a needs assessment to understand the demand for continuing professional development for health professionals in Tanzania. This will help the university develop and deliver continuing education courses at the university and throughout the country.

• To mark the conclusion of the ALP, MUHAS and UCSF hosted a Dissemination Conference attended by stakeholders from across Tanzania. Attendees recommended that the work produced by ALP be used to train and support health professionals throughout the country.

Aga Khan University

In 2011, a two-year-old partnership between Aga Khan University (AKU) and UCSF continued to bear fruit. The collaboration is aimed at developing models of primary health care delivery across East Africa and Asia with the goal of reducing maternal, newborn, and child mortality.

The UCSF Department of Family and Community Medicine is helping AKU develop a Family Medicine Residency Program, and arrangements are underway to appoint a UCSF faculty member to be the program’s founding director. Planning to set up an integrated primary health care model program in coastal Kenya is progressing. During 2011, work to
define a partnership with UCSF’s Center for Stem Cell and Regenerative Medicine began. Early plans include training AKU graduate and post-doctoral students in stem cell biology at UCSF, and UCSF holding a summer program in regenerative medicine in Nairobi for participants from Africa and the Middle East.

During a visit to UCSF in April, His Highness, the Aga Khan, was awarded the 2011 UCSF Medal. Haile Debas serves on the AKU Board of Trustees.

Global Research Enterprise Support (G-RES)

This UCSF initiative, directed by Dr. Paul Volberding—newly appointed GHS director of research—and co-led by GHS and the Clinical and Translational Science Institute, continued to work across the UCSF community to support international researchers at UCSF. For example, G-RES:

- **Evaluated more than 174 travelers** for their immunization and prophylaxis needs at the G-RES-sponsored UCSF Travel Clinic.

- **Worked with UCSF’s Risk Management office** to develop resources on liability coverage for international clinical trials.

- **Expanded an international projects database** to provide information on over 3,000 projects conducted by more than 400 UCSF faculty in 119 countries. The database allows users to search on international activities and awards at UCSF, create reports, and identify potential partnerships.

- **Provided international project support and resources** for budgeting, grants, logistics, and travel information through a **web portal** for UCSF faculty, staff, and students conducting research abroad.

- **Launched the International Research Advisory Council** to address issues and needs of international researchers.

**UCSF Cuba Program in Health Diplomacy**

In its fourth year of support from the Atlantic Philanthropies, the UCSF Cuba Program in Health Diplomacy, directed by Nancy Burke, PhD, continued to develop collaborative research projects and educational enrichment activities, including the following:

- Dr. Ted Miclau and colleagues led a **one-day workshop** on clinical research for over 100 orthopedic surgeons in Havana in June 2011. The course will be offered again in Cuba and in other countries in Latin America.

- Dr. Burke and Dr. Regina Otero-Sabogal collaborated with Cuban colleagues in delivering a **workshop in Havana on best practices** and proven interventions for chronic diseases. They continue to collaborate on a pilot research study looking at patient self-management of diabetes.

- In collaboration with UC-Cuba, a multi-campus academic collaboration, the program awarded grants to two students from the University of California to support the development of health-related research projects. UCSF medical student Kendra Johnson is focusing on the community-based model of care used in Cuba, while UC Berkeley anthropology graduate student Alissa Bernstein undertook field research in Bolivia on the impact of Cuban medical diplomacy on Bolivian health policy.
Global Health Sciences works with staff and faculty across the UCSF community and the University of California system to bring global health concerns to the forefront, and implement innovative programs. The extensive experience and expertise of our faculty members has enabled GHS to take a leading role in boosting the visibility of global health needs and developing and disseminating new models of research and practice both in the US and around the world.

**Consortium of Universities for Global Health (CUGH)**

2011 was a big year for CUGH, an association of universities with global health programs that has been headquartered at GHS since its founding in 2008. The achievements and activities of the past year will culminate in the move to a new home in Washington, DC in 2012.

- **Merged with GHEC.** In December 2011, CUGH and the Global Health Education Consortium (GHEC) completed a merger, aligning their shared missions and leveraging their complementary strengths. The combined organization broadens the global health expertise and capabilities that member institutions value as important to supporting academic global health programs.

- **Membership growth:** CUGH welcomed 14 new member institutions in 2011, bringing the total to 65. Together with GHEC, CUGH membership will soon surpass 100 institutions.

- **2011 Annual Meeting:** In November, CUGH partnered with GHEC and the Canadian Society for International Health to host the 2011 Global Health Conference in Montreal, Canada. The meeting drew over 1,400 attendees from 62 countries, and included more than 500 students. CUGH’s next annual meeting will be held in Washington, DC on March 14–16, 2013.

**University of California Global Health Institute (UCGHI)**

Directed by GHS Founding Executive Director Haile Debas and Dr. Thomas Coates from UCLA, UCGHI is working to build an interdisciplinary, system-wide academic global health program that leverages the expertise of the 10 UC campuses to meet the growing interest and demands of students and faculty in California. The Institute (whose administrative base is at UCSF) made good progress in 2011. Here are some highlights:

- **The three Centers of Expertise—Migration & Health; One Health; and Women’s Health & Empowerment—continued to build programs in education and training, research, and knowledge dissemination** while forming new strategic partnerships in the US and around the world. The Centers have served as critical nexus points for global health by offering a diverse range of programs including summer research fellowships for students and creating new partnerships enabling collaborative projects in research and training.

- **A proposal for a multi-campus Masters of Science in Global Health program** is currently in its final stages of development. The multi-disciplinary program will take place on three UC campuses and will provide students with real-world experiences and skills to equip them for leadership roles in global health. The degree program will offer rigorous training in research methodology with specialization tracks on emerging global health issues.

- **Building on the current momentum and enthusiasm for global health programs in California,** an anonymous donor made a generous $1 million gift to GHS to sustain the activities of UCGHI. With this support, UCGHI will continue to build its programs and develop new initiatives now that the Bill & Melinda Gates Foundation grant that launched UCGHI has come to an end.

**Beverly Oda, Minister of International Cooperation of Canada giving opening remarks at the 2011 Global Health Conference.**
• **Advocacy and Strategic Communications:** CUGH developed and distributed to its members an advocacy handbook with comprehensive information about the US legislative process and global health policy and budgetary decisions, as well as step-by-step instructions on planning and executing strategies for highlighting the value of global health programs and communicating the important role that the academic community plays in creating equity and reducing health disparities worldwide.

• **International Resource Center:** CUGH partnered with the National Association of College and University Business Officers (NACUBO) and High Street Partners to launch the International Resource Center, a web resource for colleges and universities engaged in international activities (www.irc.nacubo.org).

• **Executive Director Search:** CUGH has begun a search for a new executive director to lead the Washington, DC office and take CUGH to the next level of growth.

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**Transforming Health Education Globally: Four Years After**

Some of the biggest names in the field of global health came to UCSF on September 9, 2011 to discuss how to work together to improve the education of health professionals in the US and around the world. The symposium, “Transforming Health Education Globally: Four Years After,” coincided with GHS Executive Director Jaime Sepulveda’s first week on the job, and provided an opportunity to reflect on the progress of initiatives conceived at a 2007 symposium that he led at UCSF. Among the 140 participants were global health leaders, including Roger Glass, Director of the Fogarty International Center; Lincoln Chen, President of the China Medical Board; Julio Frenk, Dean of the Harvard School of Public Health; and Harvey Fineberg, President of the US Institute of Medicine.
**Financial Summary**  
July 1, 2010 – June 30, 2011

**SOURCES**

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<tr>
<th>Source</th>
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<td>Student Fees &amp; Tuition</td>
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**Total Sources** $30,602,630

**USES**

**FUNDED BY CAMPUS SOURCES**

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**Other Expenses** $26,743,837

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**Funded by Other Sources**

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<td>Recharges</td>
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**Total Uses** $28,254,674

**End of Year Balance** $2,347,956

Note: All funds under GHS management, as of June 30, 2011 general ledger.

1 Revenue from Grants & Contracts and Recharges is reflected equal to expenditures for the fiscal year.

2 Includes $225,000 of Galante Professorship expenses.

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**GHS Financials**

**UCSF Global Health Sciences 2011 Annual Report GHS Financials | 25**

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**GHS Expenditures by Major Sources of Funding, 2007–2011**

<table>
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<tr>
<th>Fiscal Year</th>
<th>Grants &amp; Contracts</th>
<th>Gifts &amp; Endowments</th>
<th>Student Fees &amp; Tuition</th>
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</tbody>
</table>

GHS was funded by 70 grants and contracts during the 2010–2011 fiscal year.
GHS Governance

GHS Advisory Council

In tandem with the UCSF Foundation, the GHS Advisory Council works with the Executive Director to shape GHS’ future and raise private support. The Advisory Council is instrumental in continuing to build GHS’ international reputation in the growing field of global health, and works with faculty leadership and development staff to plan and implement a comprehensive development program to support core activities of GHS and enable future funding priorities.

T. Robert “Bob” Burke  
Co-Chair, GHS Advisory Council; Co-Founder & Former Director, AMB Property Corporation (now Prologis, Inc); Co-Founder & Managing Director, Metropolitan Real Estate Equity Management

Ken Drazan  
Managing Director, Bertram Capital

Victoria Hale  
Founder, Medicines360

Nicholas Hellmann  
Executive Vice President, Medical & Scientific Affairs, Elisabeth Glaser Pediatric AIDS Foundation

Sandra R. Hernández  
CEO, The San Francisco Foundation

The Honorable Howard H. Leach  
President, Leach Capital, LLC

Cecilia C. M. Lee  
Chairman, David S. Lee Foundation

David S. Lee  
Chairman of the Board, eOn Communications Corporation

Alix Marduel  
Consulting Professor, Stanford University Medical Center

Sanford R. “Sandy” Robertson  
Founding Partner, Francisco Partners

William J. Rutter  
Co-Chair, GHS Advisory Council; Chairman and CEO, Synergencis, LLC

Jonathan Schwartz  
Founder and CEO, Informed Biometry Corporation

Lloyd “Holly” Smith  
Associate Dean Emeritus, UCSF School of Medicine

Andrew Woebier  
Managing Director, Greenhill & Co Inc.

Ex Officio

Haile T. Debas  
Founding Executive Director, UCSF Global Health Sciences; Senior Global Health Advisor, UCSF

Richard Feachem  
Former Executive Director, UCSF Global Health Sciences; Director, Global Health Group

Jaime Sepulveda  
Executive Director, UCSF Global Health Sciences

GHS Leadership

Ann Bourn  
Director of Operations, Global Strategic Information, Prevention & Public Health Group

Elizabeth Brashers  
Chief Operating Officer, Global Health Group

Haile T. Debas  
Director, UC Global Health Institute; Senior Global Health Advisor, UCSF

Richard Feachem  
Director, Global Health Group

Gail Kennedy  
Director of Programs, Global Strategic Information, Prevention & Public Health Group

Daisy Leo  
Program Coordinator

Georgina Lopez  
Manager, Finance and Administration

Paula Murphy  
Director of Communications

Karen Nelson  
Education Programs Officer

George Rutherford  
Director, Prevention & Public Health Group

Jaime Sepulveda  
Executive Director

Chuck Smukler  
Director of Administration, Finance and Operations

Chris Stewart  
Director, Clinical Scholars Program and Pathways Program in Global Health

John Ziegler  
Director, Graduate Programs
The Graduate Group in Global Health Sciences

The Graduate Group is the guiding faculty for teaching and mentoring all students in Global Health Sciences. It includes faculty from each of the four UCSF schools and from UCSF’s graduate division.

Dentistry
Pamela Den Besten, DDS, MS
Professor, Orofacial Sciences
John S. Greenspan, BDS, PhD
Professor, Orofacial Sciences
Peter Loomer, DDS, PhD
Associate Professor, Orofacial Sciences
Brian Schmidt, DDS, MD, PhD
Associate Professor, Oral and Maxillofacial Surgery

Medicine
Vincanne Adams, PhD
Professor, Anthropology, History & Social Medicine
Nancy E. Adler, PhD
Professor, Psychiatry
Robert Baron, MD
Associate Dean, Graduate Medical Education, Continuing Medical Education
Claire D. Brindis, DPH
Professor, Pediatrics; Nancy Burke, PhD
Assistant Professor, Cancer Center
Lisa M. Butler, PhD
Assistant Research Epidemiologist, Epidemiology & Biostatistics
Peter Carroll, MD, MPH
Professor, Urology
Craig Cohen, MD
Associate Professor, Obstetrics & Gynecology
Richard R. Coughlin, MD
Associate Clinical Professor, Orthopaedic Surgery
Jeffery S. Cox, PhD
Associate Professor, Microbiology and Immunology
Madhavi Dandu, MD, MPH
Assistant Professor, Medicine
Nicholas Daniels, MD
Associate Professor, General Internal Medicine
Lynae Darbes, PhD
Assistant Professor, Epidemiology & Biostatistics
Haile T. Debats, MD
Professor, Surgery

Teresa M. Depineres, MD
Assistant Clinical Professor, Obstetrics & Gynecology
Daniel P. Dohan, PhD
Assistant Professor, Institute for Health Policy Studies
Grant Dorsey, MD
Assistant Professor, Medicine
Gerald Dubowitz, MD
Assistant Professor, Anesthesia
Shari Dworkin, PhD, MS
Associate Professor, Social and Behavioral Sciences
Laura Esserman, MD, MBA
Professor, Surgery
Diana L. Farmer, MD
Professor, Surgery
Richard G.A. Feachem, KBE, FREng, DSc(Med), PhD
Professor, Epidemiology & Biostatistics
Monica Gandhi, MD
Assistant Professor, Medicine
Roland Gosling, MD, PhD
Associate Professor of Epidemiology and Biostatistics
Kevin Grumbach, MD
Professor and Chair, Family & Community Medicine
Judy Hahn, PhD
Assistant Professor, Infectious Disease
Tom L. Hall, MD, DPH
Lecturer, Epidemiology & Biostatistics
Anke Hemmerling, MD, PhD, MPH
Academic Coordinator, Obstetrics & Gynecology
Margaret A. Handley, PhD
Assistant Professor, Family & Community Medicine
Diane V. Havir, MD
Professor, Medicine
Robert A. Hiatt, MD, PhD
Professor and Chair, Epidemiology & Biostatistics
Nancy Hills, PhD
Assistant Professor, Neuroradiology
Philip Hopewell, MD
Professor, Medicine

Harry E. Jergesen, MD
Professor of Clinical Orthopaedic Surgery
James G. Kahn, MD
Professor, Institute for Health Policy Studies
Mary M. Knudson, MD
Professor, Surgery
Amy Levi, PhD, MSN
Associate Clinical Professor, Obstetrics, Gynecology & Reproductive Sciences
Thomas M. Lietman, MD
Associate Professor, Proctor Foundation
Christina P. Lindan, MD
Associate Professor, Epidemiology & Biostatistics
Stuart Lustig, MD, MPH
Assistant Clinical Professor, Psychiatry
Sarah B. Macfarlane, PhD, MSc
Professor, Epidemiology & Biostatistics
Todd P. Margolis, MD, PhD
Professor, Ophthalmology; Director, Proctor Foundation
Jeffrey N. Martin, MD
Associate Professor, Epidemiology & Biostatistics
James H. McKerrow, PhD, MD
Professor, Pathology
Susan Meffert, MD
Clinical Fellow, Psychiatry
Theodore Miclau, MD
Professor, Orthopaedic Surgery
Suellen Miller, PhD, CNM, MHA
Professor, Obstetrics & Gynecology
Dominic Montagu, DrPh, MBA, MPH
Assistant Professor, Epidemiology & Biostatistics
Steve Morin, PhD
Professor in Residence, Director, Center for AIDS Prevention Studies
Anna Naples-Springer, MPH
Assistant Adjunct Professor, General Internal Medicine
Kimberly Page, PhD
Professor, Medicine
Nursing
Kim Baltzell, RN, PhD, MS
Assistant Clinical Professor, Obstetrics & Gynecology
Patricia E. Benner, PhD
Professor and Chair, Social & Behavioral Sciences
Adele E. Clarke, PhD
Professor, Social & Behavioral Sciences
Shari Dworkin, PhD, MS
Associate Professor, Social & Behavioral Sciences
Judy Martin-Holland, RN, PhD
Associate Dean, Academic Services
Carmen J. Portillo, PhD
Professor, Community Health Systems
Sally Rankin, RN, PhD
Professor and Associate Dean, International Programs and Global Health
Mary Sutphen, PhD
Assistant Adjunct Professor, Social & Behavioral Sciences
Lisa Thompson, RN, PhD
Assistant Professor, Family Health Care

Pharmacy
Tina Brock, EdD, MS, BSPharm
Professor, Clinical Pharmacy
Charles Craik, PhD
Professor, Pharmaceutical Chemistry
Cathi Dennehy, PharmD
Associate Clinical Professor, Clinical Pharmacy
B. Joseph Guglielmo, PharmD
Professor and Chair, Clinical Pharmacy
Ogechi Ikediobi, PharmD, PhD
Assistant Professor, Clinical Pharmacy
Steven R. Kayser, PharmD
Professor, Clinical Pharmacy
Helene L. Lipton, PhD
Professor, Clinical Pharmacy

University of California, Berkeley
School of Public Health
William H. Dow, PhD
Associate Professor, Health Economics
Wayne Enanoria, PhD, MPH
Lecturer, Division of Epidemiology/Biostatistics
Arthur Reingold, MD
Professor and Head, Epidemiology and Infectious Diseases

UC Global Health Institute
Thomas Coates, PhD
Professor, Infectious Diseases, Associate Director, UCLA AIDS Institute, Co-director, UC Global Health Institute—UCLA
Wayne Cornelius, PhD
Professor, Political Science, Co-Director of Education, UC Global Health Institute, Associate Director, UC Global Health Institute, Center of Expertise on Migration and Health—UCSD
Anil Deolalikar, PhD
Professor, Economics, Co-director, UC Global Health Institute, Center of Expertise on One Health—UCR
Marc Schenker, MD, MPH
Professor, Medicine and Public Health, Co-director, UC Global Health Institute, Center of Expertise on Migration and Health—UCD
Stefanie Strathdee, MSc, PhD
Professor, Associate Dean of Global Health Sciences, Co-director, UC Global Health Institute, Center of Expertise on Migration and Health—UCSD
Michael Wilkes, MD
Professor, Internal Medicine—UCD
Marylynn Yates, PhD
Professor and Chair, Environmental Sciences, Steering Committee, UC Global Health Institute, Center of Expertise on One Health—UCR
GHS Partners & Funders

Academic Institutions
Aga Khan University
Blood Systems Research Institute
Centro de Investigacao de Doencas Infecciosas
Eduardo Mondlane University, Mozambique
Federal University of Rio Grande do Sul (Porto Alegre), Brazil
Hanoi School of Public Health, Vietnam
Imperial College, London, UK
Institute of Development Studies, UK
International Training & Education Center for Health (ITECH)
J. David Gladstone Institutes
Jiangsu Institute of Parasitic Diseases, China
Johns Hopkins University
Karolinska Institute, Sweden
Kilimanjaro Christian Medical College, Tanzania
Knowledge Hub for HIV Surveillance, Andrija Stampar School of Public Health, University of Zagreb, Croatia
Knowledge Hub for HIV Surveillance, Kermanshah University, Iran
Liverpool School of Tropical Medicine, UK
London School of Hygiene and Tropical Medicine (LSHTM), UK
Makerere University, School of Public Health, Uganda
Menzies School of Health Research, Australia
Muhimbili University of Health and Allied Sciences (MUHAS), Tanzania
Noguchi Memorial Institute for Medical Research (NIMRI), University of Ghana
Nossal Institute of Melbourne University, Australia
Paracelsus Medical University Salzburg, Austria
Peking University, China
Radboud Universiteit Nijmegen, The Netherlands
Regional Institute for Population Studies (RIPS), University of Ghana
Tehran University of Medical Sciences, Iran
Tufts University
Universidad Cayetano Heredia, Peru
Universidad de Ciencias Médicas de la Habana (UCM-H), Girón, Cuba
University of Botswana
University of California, Berkeley
University of California, Davis
University of California, Los Angeles
University of California, Riverside
University of California, San Diego
University of Florida
University of Ibadan, Nigeria
University of Minnesota, School of Public Health
University of Nairobi, Kenya
University of Namibia
University of New South Wales, Australia
University of Pennsylvania
University of Queensland, Australia
University of Washington
Vanderbilt University, Institute of Global Health
VA Medical Center, San Francisco

Governmental/Global Agencies
Affordable Medicines Facility – malaria (AMFm) of the Global Fund to Fights AIDS, Tuberculosis and Malaria (GFATM)
African Leaders Malaria Alliance (ALMA)
Australian Agency for International Development (AusAID)
Bagamoyo District Health Council, Tanzania
California Department of Public Health
Cambodian National Centre for HIV/AIDS (NCHADS)
Centers for Disease Control & Prevention (CDC)
Centers for Disease Control & Prevention, Country Program Offices in Cote d’Ivoire, Dominican Republic, Ghana, Kenya, Mozambique, Namibia, Rwanda, Tanzania, Uganda, Vietnam, Zambia, Zanzibar
Centers for Disease Control & Prevention, Global AIDS Program
Ghana AIDS Commission
Instituto Nacional de Salud Publica (Cuernavaca), México

Kenya Medical Research Institute
Ministries of Health & National Malaria Programs of Namibia, Solomon Islands, South Africa, Swaziland, Vanuatu, Zimbabwe
National Malaria Programs of Angola, Bhutan, China, Indonesia, Malaysia, Mozambique, North Korea, Philippines, South Korea, Sri Lanka, Thailand, Vietnam, Zambia, Zimbabwe
Ministries of Health in Ghana, Kenya, Mozambique, Namibia, Nigeria, Rwanda, Tanzania, Uganda, Vietnam
Ministry of Finance and Development Planning, Lesotho
Muhimbili National Hospital, Tanzania
National AIDS Control Programs in Brazil, Ghana, Kenya, Mozambique, Namibia, Rwanda, Tanzania, Vietnam, and Zanzibar
National Institute of Medical Research, Tanzania
San Francisco Department of Public Health
Tanzania Commission for AIDS
Joint United Nations Programme on AIDS (UNAIDS)
UK Department for International Development (DFID)
US Agency for International Development (USAID)
US President’s Malaria Initiative
World Health Organization (WHO)

NGOs, Corporate Partners, Networks
Aga Khan Development Network
African Medical and Research Foundation (AMREF)
Asia Pacific Malaria Elimination Network (APMEN)
Cambodian Women’s Development Agency (CWDA)
Center for Health Market Innovations
Centro de Estudos de AIDS/DST de Rio Grande do Sul (CEARGS), Brazil
Centro de Promoção Y Solidaridad Humana, Inc. (CEPROSH), Brazil
Chemonics International
Clinton Health Access Initiative (CHAI)
dkt International
The Elimination Eight (E8) Regional Initiative
Family AIDS Care and Education Services (FACES)
Family Health International (FHI)
Futures Group International
INAS—NGO for the International Collaboration and Development, Ukraine
Instituto Peruano de Paternidad Responsable (INPPARES), Peru
Institute of Migration (IOM)
Malaria Atlas Project (MAP)
Marie Stopes International (MSI)
Medical Research Council of South Africa (MRC)
Organic Health Response (OHR)
Pacific Malaria Initiative (PacMi)
Pathfinder International
Population Council
Population Services International (PSI)
PricewaterhouseCoopers
Public Health Foundation Enterprises (PHFE)
Results for Development Institute (R4D)
Roll Back Malaria (RBM) Partnership
San Francisco AIDS Foundation
SEEK Development, Berlin, Germany
South African Cochrane Center, MRC
Southern African Malaria Elimination Support Team (SAMEST)
Swami Vivekananda Youth Movement (SVYM), India
Teach for Health
Tropical Diseases Research Centre (TRDC), Zambia

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Bill & Melinda Gates Foundation
California Department of Health
California Program on Access to Care
California State University Bakersfield Foundation
Centers for Disease Control and Prevention
Clinton Health Access Initiative (CHAI)
Eustace-Kwan Family Foundation
ExxonMobil Foundation
Futures Group International
Gilead Sciences
Glaser Progress Foundation
Global Fund to Fights AIDS, Tuberculosis and Malaria (GFATM)
Hanoi School of Public Health
H. W. Goldsmith Foundation
Joffe Charitable Trust
KPMG LLP
Mount Zion Foundation
National Institutes of Health:
  - John F. Fogarty International Center
  - National Institute of Child Health & Human Development
Pangaea Global AIDS Foundation
Partnership for Maternal, Neonatal and Child Health (PMNCH)
Population Council
Results for Development Institute (R4D)
Rockefeller Foundation
Swaziland Ministry of Health
T. Robert and Katherine S. Burke Family Fund
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USAID-SHOPS
Vanderbilt University
Vietnam Education Foundation
The World Bank Group
World Bank Institute
World Health Organization