



FOGARTY INTERNATIONAL CENTER • NATIONAL INSTITUTES OF HEALTH • DEPARTMENT OF HEALTH AND HUMAN SERVICES

\$20M awarded to train next generation of researchers

To help foster the next generation of global health scientists, Fogarty and its NIH partners are 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.

About \$20.3 million will be awarded over the next five years to support 400 early-career health scientists on nearly year-long research fellowships in 27 low- and middle-income countries. The Fogarty Global Health Program for Fellows and Scholars will provide five consortia of academic institutions with about \$4 million each, to support the training activities of a total of 20 partner institutions. In addition to Fogarty, 17 NIH institutes and centers have expressed an interest in contributing funds to the effort, if there are qualified scholar and fellow applicants with relevant expertise.

Each consortium will develop and support global health research training programs that provide focused mentoring for participants and diverse clinical research experiences at approximately 80 established research sites in low-resource settings. Program trainees will study the traditional

Photo by Belinda O'Donnell



Fogarty is awarding \$20 million to foster the next generation of global health research leaders through its Fellows and Scholars program. Raabya Rossenkhan, a previous program participant, studied infectious diseases in Botswana.

global health problems such as HIV/AIDS, tuberculosis, malaria and maternal and child health, and will address the chronic non-communicable diseases that cause a majority of deaths in developing countries, such as cancer, cardiovascular disease and diabetes. ... continued on p. 6

White House encourages global health innovations

Innovation has been the theme of several recent White House events held to launch programs that encourage "big data" research collaborations, reward inventors for solving global problems, and establish partnerships with U.S. academic institutions to improve America's aid efforts abroad.

"A core part of my global development strategy is harnessing the creativity and innovation of all sectors of our society to make progress that none of us can achieve alone," said President Barack Obama. "The new

collaborations we're launching will help save lives from hunger and disease, lift people from poverty and reaffirm America's enduring commitment to the dignity and potential of every human being."

One project unveiled by the White House Office of Science and Technology Policy will engage at least six federal science agencies in a \$200 million collaboration to develop core technologies and other resources needed to manage and analyze enormous data sets. One such example is a partnership between NIH and Amazon ... continued on p. 4

FOCUS



Fulbright-Fogarty Fellows

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Child health expert stresses early interventions



Dr. Alejandro Cravioto

Early interventions like adequate nutrition and vaccination programs are essential to improving and maintaining child health, according to Dr. Alejandro Cravioto, executive director of International Centre for Diarrheal Disease Research (ICDDR, B) in Dhaka, Bangladesh. Cravioto, an expert in diarrheal diseases and their effect on childhood nutrition and development, recently visited NIH to deliver the annual Lawton Chiles International Lecture on Maternal and Child Health in the Americas. He shared lessons learned both from decades of experience in his native Mexico and from his tenure at ICDDR, B, where he has held the executive director position since 2007.

According to Cravioto, the effectiveness of child health programs often hinges on key factors like timing. “You really have to focus interventions early in life to have an impact,” he said, citing a nutrition study carried out in Guatemala. “The first 24 months of life, exactly after breast feeding stops, is when you really need to make sure that the child receives something that allows them to start growing at the same levels that they were with the breast milk. That’s the window we’ve lost for many reasons.” Geography can also be a factor, he said, describing the prevalence of stunting in Mexican children living in the southern part of Mexico and in rural areas of the country during the 1980s.

Early interventions including adequate nutrition and vaccinations are essential to child health in locations such as Bangladesh, according to child health expert Dr. Alejandro Cravioto.



Photo by Curt Carnemark/World Bank



Poor nutrition has caused stunting among many Mexican children living in rural areas, said Dr. Alejandro Cravioto during a recent NIH speech.

The need to reduce poverty by changing how it is viewed and the “way we subsidize it” is also important, said Cravioto. “The problem with most programs subsidizing food in Mexico was even with the money being spent it wasn’t really going to the people who needed it.” Changes made to these programs—including conditional cash transfers and giving women benefits instead of men—greatly increased their effectiveness.

Cravioto described both successes and remaining challenges, citing a neonatal tetanus vaccine program that targeted girls in Matlab, Bangladesh, and was comparable to oral rehydration therapy in terms of effectiveness and lives saved. Inroads have also been made in Latin America and the Caribbean over the years, he said, including an “umbrella of protection” from vaccines, survival rates approaching those of Europe and the U.S., and dropping fertility rates. Diabetes, obesity and inadequate education systems, however, remain threats to child health in the region, he stressed.

“There’s been a huge reduction in the number of children being born, and the number of children per family,” he said. “We now have a population that is growing up fast, is healthy, requires less services, and that needs to be productive to increase our economic capacity and the well-being of other people who live there.” A major challenge, said Cravioto, will be “how to not only provide services but how to provide these people with a future.”

RESOURCES

Webcast: <http://bit.ly/HHkLq>

Photo by Shehzad Noorani/World Bank

US agencies integrating science into development

One of the central goals of the Obama administration's Global Health Initiative is to encourage greater collaboration among federal agencies to increase efficiencies and maximize impact. To better coordinate U.S. efforts in the field and accelerate progress, Fogarty and USAID are planning a series of networking meetings in developing countries where multiple U.S. agencies are engaged in health-related initiatives. A pilot "science for development" meeting was held in Bamako, Mali, in late January, which brought together more than 100 U.S. and Malian scientists, government officials and development experts for a week-long session. Their goal was to identify ways research can be better incorporated into development activities to improve their effectiveness. The session is intended to serve as a model, with similar gatherings being planned by U.S. missions in Ghana, Ethiopia and Indonesia.

U.S. Ambassador Jimmy Kolker told the group the global financial crisis

U.S. agencies held a "science for development" meeting in Mali to identify ways research can be incorporated into development efforts.



Photo by Curt Carnemark/World Bank



U.S. Ambassador Jimmy Kolker urged American health researchers and aid workers in Mali to better coordinate their efforts and engage Malian scientists to study approaches to improve health in the country.

and constrained budgets require evidence-based programs that produce measureable results. "There may not be more money for health so we require more health for the money," said Kolker, who is Deputy Director of the HHS Office of Global Affairs. In addition, he recommended GHI programs collect baseline data, keep good records and use data to improve implementation.

The GHI is based on a comprehensive, whole-of-government approach to global health and is intended to facilitate the integration, synergy and strategic alignment of U.S. research and technical guidance to help achieve country-specific health goals. In Mali, U.S. agencies are conducting an inventory of the nation's health research to better understand its breadth and depth, locate any knowledge gaps and find ways to address those gaps within existing portfolios. Also, they are identifying best practices and investigating how they can be scaled-up.

Meeting participants included Mali's health minister and other government officials, Malian scientists from academia and NGOs, as well as U.S. researchers and administrators from USAID, NIH, CDC, Department of Defense and the Peace Corps. The conference included presentations, discussions, group work and site visits to U.S.-supported projects. NIH has significant research and research training activities involving malaria, HIV/AIDS and TB, all in collaboration with the University of Bamako.

While the coup in Mali has slowed progress temporarily, the U.S. Mission is producing a follow-up action plan to better incorporate existing in-country research expertise into the development activities to improve progress. Some GHI funding is distributed by individual country offices so it can be directed to the highest priority needs locally.

A portion of these funds may be available for operations research conducted by in-country scientists. In addition, USAID's recently announced Partnerships for Enhanced Engagement in Research (PEER) program may provide additional opportunities for implementation science studies. PEER is intended to capitalize on competitively-awarded investments to support and build scientific and technical capacity in the developing world.

The Mali meeting was hosted and organized by USAID with input from NIH. To more broadly forge connections between the research and development agencies, Dr. Kathleen Handley is on detail from USAID to Fogarty to link U.S. funded scientists with development officials on the ground. She's working closely with Fogarty's Division of International Relations, led by Dr. James Herrington.

RESOURCES

USAID'S PEER news release:
<http://1.usa.gov/ljAwmT>

NSF's PEER website:
<http://bit.ly/HPbQRq>

Microbicides provide new hope for HIV prevention in women

Young women bear the brunt of the HIV epidemic in sub-Saharan Africa, acquiring the virus much earlier than men, and having access to fewer options for prevention.

That's why longtime Fogarty grantee Dr. Quarraisha Abdool Karim said she's been searching for a microbicide gel that females can control and that would be effective at preventing heterosexual transmission. As associate director of the Centre for the AIDS Programme of Research in South Africa, or CAPRISA, she knows the staggering statistics all too well.

"The difference between genders is a key driver of the epidemic," she observed during a recent address to NIH staff. "There is no end in sight," she said, with large numbers of African women continuing to become infected while still in their teens.

In a study of HIV prevalence in a rural area of South Africa, by age 14, only about 1 percent of boys were infected while 2.2 percent of girls were, she noted. By the age of 19 to 20, the boys' infection rate had only risen to 1.1 percent while the girls' rate had leapt to 16 percent. "We simply cannot allow this to continue," she stressed.

Karim—who also holds faculty positions at the University of KwaZulu-Natal in Durban and Columbia University in New York—reported her team has also studied HIV infection among sex workers, since they play a key role in

White House . . . *continued from p. 1*

Web Services that will make the world's largest data set on human genetic variation publicly available on Amazon's cloud.

"The explosion of biomedical data has already significantly advanced our understanding of health and disease. Now we want to find new and better ways to make the most of these data to speed discovery, innovation and improvements in the nation's health and economy," said NIH Director Dr. Francis S. Collins.

New model licensing agreements, including one developed by NIH, will expedite licenses for nonprofit institutions to provide broad global access to technologies, reduce

Photo by Jeff Gray



Fogarty grantee Dr. Quarraisha Abdool Karim recently presented her microbicide research to NIH staff.

the disease's spread. The researchers discovered the women earn 25 percent less for sex if they insist their clients wear a condom. That provided the impetus for the microbicide trial in this population.

Over the past two decades, substantial effort has been directed toward funding a microbicide that would work. Karim acknowledged the role the NIH and other funders played in supporting this critical work. Since 1998, Fogarty has supported research training for more than 400 African scientists through CAPRISA's partnership with Columbia, she noted. In addition, the National Institute of Allergy and Infectious Diseases has provided substantial research funding since 2002.

Now the hard work is finally paying off. In July 2010, the CAPRISA 004 trial demonstrated for the first time that 1 percent tenofovir gel was efficacious in preventing infection. Lauded as "Breakthrough of the Year" by *Science* magazine, the results encouraged policymakers to begin to have hope the epidemic could be controlled. Further analysis of the data has identified several key lessons for enhancing the efficacy of tenofovir gel and informing the conduct of future trials. These include the difficulty in achieving adequate adherence, the importance of ensuring there are high vaginal concentrations at the time of exposure and better understanding the increased risk of infection if genital inflammation is present.

If all goes well, she and her team will have regulatory approval and be able to launch the gel by the end of 2016. That gives her great hope, she said. Karim predicted successful implementation of the microbicide could prevent about 1.3 million new infections in South Africa alone.

transaction costs and encourage transfer of more government-owned technologies, such as vaccines, to promote global public health. In addition, the U.S. Patent Office announced a competition to reward inventors who demonstrate how their patented technology advances humanitarian causes and addresses a global challenge.

Finally, a new USAID partnership with universities is intended to better define and more efficiently address large development challenges. The Partnerships for Enhanced Engagement in Research (PEER) program will strengthen the understanding of potential problems and the range of solutions, support multidisciplinary approaches, and encourage innovation to improve effectiveness and reduce costs.



Photo by Louise Borsi

DR. PAMELA COLLINS



Mental disorders are the leading cause of disability around the world. That's why the National Institute of Mental Health, part of the NIH, is joining with researchers from 60 countries across the globe to prioritize research initiatives in the Grand Challenges in Global Mental Health program. NIMH Director Dr. Tom Insel recently asked Dr. Pamela Collins, Director of NIMH's Office for Research on Disparities and Global Mental Health, about the effort. Here are some highlights of that conversation.

There is growing interest in global mental health. Why is that?

Well, I think we could actually ask why hasn't this happened before? We know that mental disorders are the leading causes of disability around the world. I think there's been a perception that these are problems of wealthy countries and that with so many other competing health priorities in low- and middle-income countries, how could you possibly think about mental disorders? But we have known for some time that these create an incredible burden of illness, they create an incredible burden of disability and they have to be addressed.



What is the Grand Challenges initiative and what do you hope it will accomplish?

What's important to remember about the Grand Challenges in Global Mental Health is that "global" truly means global. And we in the U.S. are part of the globe. So these are priorities that people working in more than 60 different countries came to some consensus on and there are priorities that reflect needs in every country. Certainly, if you look at the top 25 Challenges identified, you'll see issues that the U.S. mental health system needs to address, but you'll also see issues that are relevant to countries around the world, countries that don't have the level of health infrastructure that we do. I think the advantage of this is that it's an opportunity for us to learn from each other. So, it's an opportunity to address some of the daunting issues around access to care, around getting people the services they need, that will be just as relevant

to people in the U.S. who don't have mental health services as they are to people in other parts of the world.

There are so many pressing issues in global mental health—how do you propose to tackle them?

I think we need to, as a community, choose some very specific goals and perhaps direct efforts toward those. One of the things that we have been thinking about is that there are such clear inequities in terms of access to care. The treatment gap is tremendous in many low- and middle-income countries where you simply don't have the mental health specialists. How can we actually extend services in those settings? Are there other people that can provide care in those settings that are not necessarily psychiatrists? Can specialists train others to provide these kinds of services in order to get people the care they need? I think this is probably one area that's worth investing in: actually extending services.

How do you plan to work with other international funders in this area?

That's actually at the heart of this Grand Challenges initiative—really, how can we build a community of people that are working on these same issues? We're already collaborating with the World Health Organization and supporting some of those efforts in the Mental Health Gap Action Program. By continuing to build partnerships, perhaps with other funding agencies, I think this is a chance for people to pick their own piece of this pie. This is not something that we want to do alone but this is an invitation really—for researchers, for universities, for governments—to get involved in mental health and we'd like to see that kind of collaboration happen.

RESOURCES

- Video and full transcript: <http://1.usa.gov/H9g0nH>
- NIMH Grand Challenges: <http://bit.ly/HH7mji>

\$20M awarded to train next generation of researchers

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“In combining the enthusiasm of today’s young scientists with the knowledge and wisdom of America’s global health leaders, we are forming a powerful network to produce a new generation of stellar researchers capable of working in the global arena,” said Dr. Roger I. Glass, Fogarty’s director. “This program will leverage the considerable experience, relationships and infrastructure the 20 U.S. partners have built in developing countries around the globe, together with the depth and diversity of their subject matter expertise, to ensure our alumni are well-equipped to tackle the world’s most pressing health problems.”

The program will enhance the career trajectory of the participants, strengthen the global health research programs at U.S. and foreign institutions, and will bolster networking among program alumni and senior scientist mentors. Eighty percent of the program’s trainees will be post-doctoral fellows, with 20 percent entering as doctoral students.

Participating institutions were required to demonstrate they possess the capacity to provide outstanding mentored global health research education experiences, existing robust research and training activities at a developing country site, and established relationships among consortia members.

Since 2004, Fogarty has supported more than 500 fellows and scholars for significant hands-on, clinical research training experiences in low- and middle-income countries. The program was most recently managed by a coordinating center at Vanderbilt University.

NIH entities supporting the program include: Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Cancer Institute, National Eye Institute, National Heart, Lung, and Blood Institute,

To combat the rising tide of chronic diseases in Kenya, Dr. Gerald Bloomfield focused on training local health care workers in cardiology as part of his Fogarty fellowship.



Photo courtesy of Dr. Gerald Bloomfield



Photo courtesy of Dr. Joe Tucker

Dr. Joe Tucker worked to increase syphilis and HIV screening in China during his Fogarty fellowship.

National Institute of Allergy and Infectious Diseases, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institute of Biomedical Imaging and Bioengineering, National Institute of Dental and Craniofacial Research, National Institute of Diabetes and Digestive and Kidney Diseases, National Institute on Drug Abuse, National Institute of General Medical Sciences, National Institute of Mental Health, National Institute of Neurological Disorders and Stroke, National Institute of Nursing Research, Office of AIDS Research, Office of Research on Women’s Health and the Office of Behavioral and Social Sciences Research.

The 2012 Fogarty Global Health Program for Fellows and Scholars Awards:

University of California, Berkeley – CONSORTIUM LEAD

Florida International University, Miami
Stanford University, Stanford, Calif.
Yale University, New Haven, Conn.

University of California Global Health Institute – CONSORTIUM LEAD

University of California, Davis
University of California, Los Angeles
University of California, San Diego
University of California, San Francisco

University of North Carolina, Chapel Hill – CONSORTIUM LEAD

Johns Hopkins University, Baltimore
Morehouse University, Atlanta
Tulane University, New Orleans

University of Washington, Seattle – CONSORTIUM LEAD

University of Hawaii, Honolulu
University of Michigan, Ann Arbor
University of Minnesota, Minneapolis

Vanderbilt University, Nashville, Tenn. – CONSORTIUM LEAD

Cornell University, Ithaca, N.Y.
Duke University, Durham, N.C.
Emory University, Atlanta

Fogarty partnership with Fulbright provides new opportunities



The Fulbright-Fogarty Fellowships are a partnership designed to promote the expansion of research in public health

and clinical research in resource-limited settings. The Fulbright Program, part of the Department of State's Office of Academic Exchanges Programs, is administered by the Institute of International Education. In 2011, the program's first group of fellows traveled to locations in sub-Saharan Africa for mentored clinical research experiences. By the 2012-2013 application cycle, the initiative was expanded to include countries in Asia and Latin America.

The initial fellows participated in research projects in Botswana, Malawi and South Africa. Here are their stories:

Tracking drug-resistant TB in Malawi

Brian Barnett

Brian Barnett knew firsthand about holes in the health care system well before he arrived in Malawi as a Fulbright-Fogarty fellow.

Barnett's home county of 15,000 in rural Kentucky was served by one doctor. "We have all the typical southern health problems in my family: diabetes, heart disease and the like," he said. "Every time someone needed medical care it was a two-hour drive to Lexington. In the developing world, people might have to travel two days and still not get the kind of care they need."

Now Barnett is studying HIV/AIDS, tuberculosis and mother-to-child transmission of disease, based at the University of North Carolina's project in Lilongwe. The aim is to enroll all patients with first-time tuberculosis who are registering at the center for outpatient treatment. Using liquid culture methods, which allow for quick detection of TB drug resistance, they are analyzing sputum samples



Photo courtesy of Brian Barnett

Fulbright-Fogarty Fellow Brian Barnett, who is studying HIV/AIDS in Malawi, says there will always be a global component to his work.

to quantify the prevalence of multiple drug resistant TB (MDR-TB) in Lilongwe.

"Our collection of demographic data will help us to better characterize the impact of drug resistant TB in these individuals," said Barnett. He said he is learning "a significant amount" about the pathology, diagnosis and treatment of tuberculosis, especially in those with HIV, who comprise about 60 percent of enrollees. Barnett said the fellowship has also taught him to cope with unforeseen issues, such as a prolonged fuel shortage and a lack of foreign currency, which has affected the ability to import supplies.

He admits that the effect of the AIDS epidemic in Africa was an abstract concept for him prior to his arrival in Malawi. The fellowship has allowed him to see the devastating impact firsthand, he said. It's also afforded him valuable experience overseeing a research project and managing all aspects of it, from collection of data to determining a budget, to directing staff and eventually analyzing data and disseminating his interpretation.

"Before this fellowship, I would have had trouble deciding what to do for my residency next year," said the fourth-year student at the Vanderbilt University School of Medicine. "This experience will determine what I really want to do and I know there's always going to be a global component to my work."

The stories in this section were written by Steve Goldstein.

Studying HIV in South Africa

Benjamin Bearnot

When Benjamin Bearnot arrived in South Africa for his Fulbright-Fogarty fellowship, the New Yorker was immediately struck by the socioeconomic divide in the availability of health care. He splits his time between the urban headquarters of the Centre for the AIDS Programme of Research in South Africa (CAPRISA) and an affiliated clinic-research site in rural Vulindlela, 150 kilometers west of Durban.

“The poverty in this rural district is quite striking,” he said, with approximately one in three residents thought to be infected with HIV. Bearnot’s focus is on promoting HIV testing, which is critical since nearly 50 percent of individuals in Durban and the surrounding areas are unaware of their HIV status. “One important thing I’ve learned in the Fulbright-Fogarty program thus far is the importance of spending a substantial amount of time interacting with members of the community,” he said.

The fellowship has exceeded his expectations, he said, because CAPRISA “is at the extreme leading edge in terms of both basic science and clinical research agendas.” He’s been working closely with Fogarty grantee Dr. Quarraisha Abdool Karim and she’s helping him develop as an independent scientific thinker. His time in South Africa has afforded new insights into the life of a clinical investigator and the balance required to work simultaneously on several projects at different stages of the scientific process.

The fellowship, Bearnot said, “has confirmed that I would like to pursue a career as an infectious diseases clinician and physician-researcher, with a focus on disease prevention and questions of health-service delivery.” The rising fourth-year student at NYU’s School of Medicine wants to pursue a master’s degree in public health as part of his residency training in internal medicine.

One accomplishment that Bearnot speaks of with pride is

Fulbright-Fogarty fellow Benjamin Bearnot (at left) said he developed as an independent scientific thinker during his stint in South Africa.

creating an innovative research proposal to enroll adolescent and young adult participants into a Value-in-Prevention voucher-based initiative to harness existing social networks. His plan uses chain-referral sampling—where peers help the study recruit other peers—to enable the mapping of social networks and determine if these networks contain individuals with phylogenetically-clustered HIV infections, which indicate overlapping social and sexual networks.

The fellowship has allowed Bearnot to meet and interact with his peers. “We tend to be extremely like-minded and dedicated to our work,” he said, “and I hope we will be scientific collaborators and close friends for many years to come.”

Pursuing a life of service

Ryan Davis

Coming of age in the midst of the HIV epidemic and during the increasing globalization of health care had a profound influence on Fulbright-Fogarty fellow Ryan Davis and helped determine the direction of his career.

At Georgetown University, Davis majored in English literature and minored in chemistry in his pre-med studies. He enjoyed the narrative aspect of medicine and it informed his creative writing. When he volunteered at the Whitman-Walker Clinic in Washington, D.C., he listened to the way AIDS patients talked about how a diagnosis had irrevocably altered their lives. “My immediate compassion for patients with HIV grew into a broader commitment to a medical career,” he said. The reach of the disease inspired him to choose a medical school based upon its global health program, so Davis attended the Columbia University-affiliated Medical School for International Health in Beer Sheva, Israel.

The service aspect of medicine was also important to Davis. His father, a dentist and lay minister, and his mother, a public school administrator, instilled in him the notion of helping others in need. “It seemed like medicine was a chance to have a service-oriented career that included my science interests, but which also involved interpersonal connections,” Davis explained.

The fellowship, it seemed to Davis, answered the logistical and ethical challenges presented by the more typical short-term global health research projects. The Fulbright-Fogarty experience “promised a more sustained, 10-month time period to devote to a study with potentially meaningful results at a site with established partnerships between local and U.S. researchers,” he said.

Davis is developing a technique to detect acute HIV infection (AHI) using dried blood samples as part of a prevention study. Because secondary HIV transmission is acute and



Photo courtesy of Benjamin Bearnot



Photo courtesy of Ryan Davis

FOCUS ON FULBRIGHT-FOGARTY FELLOWS

scientists helps her understand the differences and similarities between species and makes her uniquely qualified for a career in public health. Despite the fact that the Botswana-Harvard AIDS Institute Partnership did not involve animal research, LeCuyer said she was aware that “many veterinarians ultimately end up working on projects that affect human health, due in part to available funding but also because of the innate interconnectedness of the physiology of all mammals.”

During her fellowship, LeCuyer is helping analyze immunoassays used to assess the recency of HIV infection in cross-sectional surveys, in order to accurately estimate HIV incidence within populations in Botswana. She noted that this data is vital to evaluating interventions but that the cross-sectional surveys tend to be inaccurate, unless population-specific parameters are applied in order to optimize the information.

“My project is to look at these parameters in a population of Botswana citizens so that this method of incidence measurement can be used more meaningfully in Botswana,” she explained. Testing has nearly been completed on a cohort of about 400 individuals, so LeCuyer can soon begin analysis of the data. She plans to test an additional study cohort to add to her sample size.

The New Mexico native spent her early years on a Navajo reservation, where her father was a Legal Aid attorney, and views public health as a way of giving back and helping people. Her fellowship has enhanced her self-confidence and encouraged her to advocate for herself, instead of relying on supervisors. She still wavers between becoming a laboratory animal veterinarian or a veterinary scientist, but the Fulbright-Fogarty experience has provided valuable insights.

“A solid understanding of what it means to be able to complete an independent research project, from its implementation through publication, is very important for both of those career paths,” said LeCuyer. “The fellowship has given me the time and experience to figure out what comes next.”

Fulbright-Fogarty fellow Tessa LeCuyer used her time in Botswana to develop her research skills and explore various career paths.



Photo courtesy of Tessa LeCuyer

Fulbright-Fogarty fellow Ryan Davis finds the social justice aspect of global health appealing and his posting in Botswana helped him clarify his career options.

recent HIV infection may contribute significantly to the epidemic in Botswana, “the potential for a test-and-treat prevention strategy would be facilitated by screening methods to detect AHI,” he said.

Davis said his aspirations for the fellowship have already been achieved, as the experience has provided “a valuable opportunity” to assess what is gained through international partnerships and how it is achieved. A more rounded image of his long-term goals has come into focus and he’s gained more experience with laboratory technique, he said, in addition to having applied his biostatistics training.

The fellowship has also given him a deeper appreciation of his parents’ lesson about giving back. “There’s intrinsically a social justice mindset in public health. Some think of it as a service job and there’s something really beautiful and important about that,” he said. “But even as you serve the greater good, you cannot lose track of the ways that disease affects the individual. That brings me back to those formative experiences I had at Whitman-Walker, which remain important to me.”

Exploring new career options

Tessa LeCuyer

Tessa LeCuyer was six years old when she decided that her top goals in life were to ride horses and become a veterinarian. That unwavering certainty about her career served her well until, in the summer before her fourth year at Washington State University’s vet school, she had a crisis of indecision: What comes after graduation?

She decided to apply for a Fulbright-Fogarty Fellowship to take time to consider several career paths.

LeCuyer believes her experience working with veterinary

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Building the next generation of global health leaders

We cannot always build the future for our youth, but we can build our youth for the future. — Franklin D. Roosevelt



I'm inspired by these wise words from America's 32nd President. One of my favorite activities as Fogarty director is having the opportunity each summer to meet with some of the rising stars who will become our future global health leaders.

Each July, I delight in speaking with these early-career doctors, dentists, scientists and veterinarians during our Fogarty Fellows and Scholars orientation here on the NIH campus. I find it invigorating to interact with them and witness their passion, idealism and commitment to improving the health of all of the world's people.

Their youthful enthusiasm is intoxicating and causes me to pause and reflect on my own career in global health. It serves as a reminder of why I decided, all those years ago, to travel to Bangladesh to study the terrible water-borne viruses that are such vicious killers, particularly of children.

I cannot overstate the impact a research fellowship in a developing country can have on an early-career scientist. The experience gives them firsthand exposure to difficult issues on the ground, while providing the opportunity to forge relationships and scientific collaborations that can boost their career trajectory and lead to a lifetime of global health accomplishments.

It's appropriate in this season of renewal that we're entering the next phase of Fogarty's Global Health Program for Fellows and Scholars, one that we believe will strengthen the quality of mentorship and will broaden the research topics studied, to more fully represent the diversity of the global health challenges we face.

I'm delighted to announce that we're awarding about \$20.3 million over five years to enhance and expand this effort. By forming a network of 20 U.S. academic institutions with substantial experience in global health research, I'm confident our alumni will be well-equipped to succeed in the global arena and become the next generation of global health leaders. (*see related article on page 1*)

With the rising tide of developing-country deaths from chronic, non-communicable diseases, it's vital that we develop scientific expertise in a wider span of health problems, from genetics to geriatrics, from cancer and diabetes to heart disease. At the same time, we must continue to build capacity in the longstanding global health topics of HIV/AIDS, malaria and TB. We must broaden our net to recruit early-career dentists, cardiologists, oncologists, neurologists, behavioral scientists, engineers, health economists and others who can help us address the full range of global health needs.

Since 2004, more than 500 Fogarty Fellows and Scholars have been supported on one-year mentored clinical research experiences at 28 top-ranked research sites in 15 countries. In 2010, the Fulbright Program formed a partnership with Fogarty, joining more than a dozen NIH Institutes and Centers in supporting the Fellows and Scholars initiative.

From these modest investments, we have seen great returns. Participants have published more than 300 articles in peer-reviewed journals and have presented research findings at numerous scientific meetings. Many have remained engaged in specific research questions important to their host countries long after the fellowships have ended—developing toolkits, starting charities to provide funding and continuing to share their expertise from afar. Several alumni have already secured independent NIH funding to continue their global health studies, one of our highest measures of success.

I look forward to meeting the next class of Fellows and Scholars as they embark on their research training experiences. While we continue to “build our youth for the future,” my hope is that it will be a future that offers a long and healthy life for all the world's people.



Global health advocate mourned

Global health advocate and U.S. Congressman Donald Payne has died of colon cancer at age 77. Payne, the highest ranked Democrat on the House Foreign Affairs Subcommittee on Africa, Global Health and Human Rights, was honored by the Foundation for NIH in 2008 for his support in combating HIV, AIDS, tuberculosis and malaria.



Karim named interim leader of SA research council

Longtime Fogarty grantee Dr. Salim Abdool Karim has been tapped to take the helm of the South African Medical Research Council. Karim is Vice-Chancellor of Research at the University of KwaZulu-Natal and director of the Center for the AIDS Program of Research (CAPRISA). He will begin his new role as interim president in April.



India awards Mohan for diabetes research

The Indian government has awarded Fogarty grantee Dr. Viswanathan Mohan its prestigious Padma Shri Award for his contributions in diabetes research. Mohan is chairman of the Madras Diabetes Research Foundation.



US honors Moroccan scientist

The U.S. State Department has named Fogarty grantee Dr. Rajae El Aouad, director of Morocco's National Institute and Hygiene, to its 2012 Women in Science Hall of Fame. The program was initiated by the Middle East and North Africa Environment, Science, Technology and Health Office to honor outstanding female scientists throughout the region and provide role models to inspire girls to study science.



Virginia names Guerrant "outstanding scientist"

Fogarty grantee Dr. Dick Guerrant was one of three to be selected as Virginia's Outstanding Scientists of 2012 by Governor Bob McDonnell. Guerrant is director of the Center of Global Health at the University of Virginia.



Fogarty trainee dies in Vietnam

Former Fogarty trainee Dr. Thien Vu, 37, has died of stomach cancer in Vietnam. Vu received his Ph.D. from the University of Texas School of Public Health with support from Fogarty's AIDS training and research program. During the last six months of his life, he counseled other cancer patients as a volunteer at a Hanoi hospital.



Anand promoted to Fogarty policy director

Fogarty has promoted Nalini Anand to direct its Division of International Science Policy, Planning and Evaluation. Anand earned a master's in public health from Johns Hopkins and a law degree from Stanford. She has been with Fogarty since 2002 and has been the division's acting director since 2010.

NIH and Lilly collaborate to speed drug development

The NIH has announced it will collaborate with Eli Lilly to generate a publicly available resource to profile the effects of thousands of approved and investigational medicines in a variety of sophisticated disease-relevant testing systems. Comprehensive knowledge of the biological profiles of these medicines and molecules may enable biomedical researchers to better predict treatment outcomes, improve drug development, and lead to more specific and effective approaches. Full News Release: <http://1.usa.gov/HD3bXf>

NIH launches clinical trials website

The NIH has launched a new website, NIH Clinical Research Trials and You, to help educate the public about clinical trials, why they matter and the benefits of participation. Website: <http://www.nih.gov/health/clinicaltrials>

Fogarty grantees produce free mentors' manual for researchers

Fogarty grantees in Uganda have produced a free mentors' manual for health sciences training in Africa. Drs. Peter Mugenyi and Nelson Sewankambo co-edited the guide, which addresses various ways to improve mentorship of both undergraduate and postgraduate students. Full Manual: <http://bit.ly/IE3hdE>

UW develops global health data catalog

The University of Washington has developed a new resource to improve data discoverability and make it easier to find relevant information about data. Called the Global Health Data Exchange, the catalog contains details of over 7,000 demographic, global public health and health-related data sources. Website: <http://bit.ly/J6rTKV>

World Bank releases fiscal study of HIV/AIDS

To help countries develop better national health plans and budgets, the World Bank has produced a study called "The Fiscal Dimension of HIV/AIDS in Botswana, South Africa, Swaziland and Uganda." The report is intended to help countries transition from emergency crisis financing for AIDS to sustainable development financing with stronger national ownership and responsibility. Full report: <http://bit.ly/IKgICc>

Funding Opportunities

Program	Details	Deadline
International Research Ethics Education and Curriculum Development Award Program (Bioethics) (R25)	http://1.usa.gov/H1Co5p	May 10, 2012
Global Infectious Disease Research Training Program (D43)	http://1.usa.gov/H0U3Gq	May 21, 2012
Planning Grant for Global Infectious Disease Research Training Program (D71)	http://1.usa.gov/GZ22uc	May 21, 2012
Fogarty HIV Research Training Program for Low- and Middle-Income Country Institutions (D43)	http://1.usa.gov/H1IH9y	July 24, 2012
Limited Competition: Planning Grant for Fogarty HIV Research Training Program for Low- and Middle-Income Country Institutions (D71)	http://1.usa.gov/H1Co5p	July 24, 2012
Training Programs for Critical HIV Research Infrastructure for Low- and Middle-Income Country Institutions (G11)	http://1.usa.gov/H0U3Gq	July 24, 2012
Chronic, Non-Communicable Diseases and Disorders Across the Lifespan: Fogarty International Research Training Award (NCD-LIFESPAN) (D43)	http://1.usa.gov/Hj3YfL	September 21, 2012
Planning Grant for Chronic, Non-Communicable Diseases and Disorders Across the Lifespan: Fogarty International Research Training Planning Award (NCD-LIFESPAN) (D71)	http://1.usa.gov/GW4lyT	September 21, 2012

For more information, visit www.fic.nih.gov/funding

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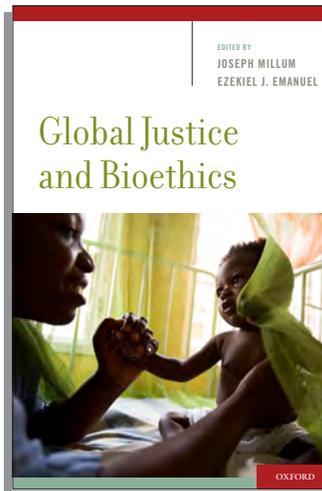


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WHAT WE'RE READING:

Global Justice and Bioethics

Oxford University Press



Fogarty bioethicist Dr. Joseph Millum co-edited this collection of original essays with Dr. Ezekiel J. Emanuel, former bioethicist at the NIH Clinical Center. This book, published by Oxford University Press, is the first to comprehensively address the intersection of global justice and bioethical dilemmas, through original essays by leading thinkers in political theory, philosophy and bioethics. The authors address the key issues concerning global justice and bioethics from two perspectives. The first is ideal theory, which is concerned with the social institutions that would regulate a just world. What is the relationship between human rights and the provision of health care? How, if at all,

should a global order distinguish between obligations to compatriots and others? The second perspective is from non-ideal theory, which governs how people should behave in the unjust world that exists. What sort of medical care should actual researchers working in impoverished countries offer their subjects? What should NGOs do in the face of cultural practices which they deem unethical? If coordinated international action will not happen, what ought individual states do?

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