



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

## NIH, Fogarty discuss health inequities at CUGH meeting

At least half of the world's population lacks access to health services, the WHO Director-General told attendees of the Consortium of Universities for Global Health (CUGH) annual meeting. Financial barriers and stigma prevent many from receiving treatment and that must be addressed, said Dr. Tedros Adhanom Ghebreyesus. "Good data is the crucial starting point for reducing health inequities," he said. "Identifying where health inequities exist is essential for reducing them." WHO has developed a health equities assessment toolkit to help countries identify underserved populations and track progress in improving access.

The CUGH conference, titled "Health Disparities: a Time for Action," brought together more than 1,800 participants from around the world who are engaged in global health activities.

In a plenary panel, Fogarty grantee Dr. Patty Garcia presented a case study of an outreach program she . . . continued on p. 2

Photo courtesy of CUGH



Fogarty Director Dr. Roger I. Glass updated CUGH attendees on the Center's activities to mark its 50th year of advancing global health science.

## On 50th anniversary, Fogarty reviews progress

To commemorate 50 years of its global health research and training programs, Fogarty is convening partners and grantees on May 1 to review accomplishments and lessons learned, as well as consider future directions and goals. The day-long symposium is titled "Fogarty at 50: What are the new frontiers in global health research?"

The *Lancet* editor Dr. Richard Horton will provide the keynote address, which will be followed by panel discussions of how to advance global health priorities. NIH Director Dr. Francis S. Collins will also present his observations on how NIH Institutes and Centers

can collectively sustain and advance the global health research agenda. Panelists will present case studies and lead conversations to explore questions such as what is needed to advance infectious disease research and achieve the end of HIV/AIDS; how can existing platforms be leveraged to address noncommunicable diseases; and what can be done to advance the global brain disorders agenda. Finally, senior investigators and their trainees will discuss the long-term impact of the multigenerational capacity building Fogarty supports.

The event is being videocast by NIH and webcast on Facebook Live: [www.videocast.nih.gov](http://www.videocast.nih.gov)

### FOCUS



#### Fogarty-supported adolescent health research fills critical gap

- Adolescents' health needs often neglected in studies
- Early pregnancy can impact well-being for a lifetime
- Encouraging healthy habits in teens reduces future NCD burden
- HIV/AIDS a key battleground for teen health researchers

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developed to provide cervical cancer screening in Peru, which she said is one of the most inequitable countries in terms of health services. She and her colleagues at the University of Cayetano Heredia developed a plan to deploy trained volunteers to reach out to women living in a slum near the Lima airport to inform them about cervical cancer. The lay workers also provided simple diagnostic tests that the women could self-administer at home and then drop off in collection boxes, where they were picked up and processed in a lab. With more than 2,000 women participating, 49 cases of cancer were discovered and referred for treatment. “Women loved self-testing in their own home and getting results by text message,” Garcia said.



Climate change disproportionately impacts people in low- and middle-income countries, said the NIH's Dr. John Balbus, during a panel session he led.

Climate change is exacerbating health inequities, as increasingly severe storms, drought, wildfires and

More than 1,800 academics, practitioners and policymakers attended the CUGH annual meeting.

heatwaves disproportionately impact those living in low- and middle-income countries, according to Dr. John Balbus, a senior advisor at the NIH's National Institute of Environmental Health Sciences, who led a conference session on the topic. He suggested authorities plan climate-ready health systems that are “resilient in the face of extreme events, and they need to be prepared for the kinds of shifts in infectious diseases, for the kinds of changes in morbidity and mortality that we've seen in heat waves.”

Health can also be improved by public policies, such as those governing food labels, sugar taxes and nicotine regulation—issues explored by a panel of participants from the Lancet-O'Neill Institute Commission on Global Health and the Law. John Monahan, a Fogarty board member and on the faculty of Georgetown University, said the Commission's upcoming report is designed to get more health professionals and lawyers working together to alleviate suffering and advance health equity. “Law is ultimately a tool for justice,” he said.

Ways to strengthen support for female leaders in global health was the discussion topic for a panel of academics and scientists, including Fogarty's director. The conversation focused on possible actions such

as cultivating institutional change, addressing cultural barriers, increasing visibility for women to help them progress in their careers and developing flexible work models. “I believe we need a shift in what we think leadership is and what that can look like,” said Stanford University professor Dr. Michele Barry, who recently hosted a conference on the subject.



Former Fogarty Fellow, Dr. Jeffrey Blander, discussed how his early foreign research experience informs his work as PEPFAR's chief innovation officer.

To encourage early-career scientists to pursue a global health career track, alumni of Fogarty's Global Health Fellows and Scholars Program discussed their experiences and presented the results of their work. One former Fogarty Fellow, Dr. Jeffrey Blander, is now chief innovation officer at the President's Emergency Plan for AIDS Relief, or PEPFAR. His work is about disruption, he said. “For example, what can you do without electricity?” One of his projects, which involved developing field tests for strep, has increased diagnoses and reduced hospital visits.

Fogarty's director applauded Blander, his peers and their faculty mentors. “This fellowship program is extraordinary in the way in which it's enriched your understanding of other cultures and enhanced your ability to work with people with different belief systems,” said Glass. “This is the best investment we've made in the last 15 years—seeding the next generation of global health researchers and leaders.”





Zimbabwe's Friendship Bench program, developed with partial support from Fogarty, helps reduce the mental health treatment gap by training lay health workers to deliver problem-solving therapy.

## Low-cost mental health innovation enables access to care in Africa, US

A woman in Zimbabwe has more problems than she can handle. She's HIV-positive, unemployed, has a husband who's violent and threatening to leave, and her 13-year-old daughter has been raped and is pregnant. Overwhelmed, she learns to prioritize her problems and identify solutions by talking with an elderly woman, a lay health worker known as a "grandmother," as they sit on a bench outside a primary care clinic.

That scenario, described by former Fogarty Fellow Dr. Dixon Chibanda, exemplifies the Friendship Bench Program he helped create to reduce the mental health treatment gap in Zimbabwe, where he's one of 12 psychiatrists in a country of 16 million people. Using a task-shifting approach, clinics refer patients to non-health care professionals trained to deliver problem-solving therapy for anxiety, depression and other common mental disorders in a safe and comfortable setting—a discreetly located bench. The concept is now being adapted for use elsewhere in Africa and even New York City.

The project began in 2006, and with Fogarty support that came later,

Chibanda conducted a systematic review of psychological interventions to identify ways to enhance the bench program. The fellowship also helped him prepare for a clinical trial, funded by Grand Challenges Canada, which showed people who experienced the bench intervention were less likely to have symptoms of depression after six months than those who received standard care that included doctors. Now, more than 70 Zimbabwean communities have benches, 400 grandmothers have been trained, and nearly 40,000 people received therapy last year, according to Chibanda.

"Being a psychiatrist, one of the things you immediately realize when you work in this part of the world is there are thousands of people who need your services, but just can't get them," Chibanda said. Tapping elderly lay health workers made sense to him because they are respected and rooted in their communities and could be trained for under \$200. Grandmother candidates must know how to read, write and use a mobile phone. Then they receive training and are evaluated on their ability to listen, summarize what they've heard and show empathy.

On the first encounter of the six-session program, the participant and grandmother spend an hour working through the three stages of the intervention. "Opening the mind" enables participants to relax and share their story; "uplifting" helps the client prioritize their problems and find solutions; and "strengthening" assures they are ready to tackle their challenges.

"The beauty of the Friendship Bench is that at the end of the very first session, you walk away with a solution and plan that you go and execute. So, when you come back, you come back with feedback," Chibanda explained. Grandmothers are supervised by peers and can contact psychiatrists or psychologists if there's something they can't handle.

Malawi has started a friendship bench program that mirrors Zimbabwe's, according to Chibanda. The concept also is being adapted for use in New York City, where permanent and mobile benches are being installed in public places—including health fairs and block parties. People seeking assistance can talk anonymously with trained community workers or peer counselors who provide support and refer them to resources where they can get help. The New York pilot project has been successful, with bench workers reporting they have interrupted suicide plans and helped people enter detox programs.

"The one thing that really resonated with me, these stories that are coming out of New York are no different than the stories coming out of Zimbabwe with regard to the people coming to the bench and the experience that the benchers and the counselors have," said Chibanda. "It's all about stories, powerful stories, which are embedded in an evidence-based approach that seeks to truly empower clients who come to the bench."

### RESOURCES

<http://bit.ly/friendshipbench>

# PROFILE

## Fogarty Fellow continues to fight heart disease in Malawi

By Karin Zeitvogel

Five years after completing a Fogarty global health fellowship in pediatric cardiology, Dr. Amy Sims Sanyahumbi has returned to Malawi with a prestigious Fogarty grant, the International Research Scientist Development Award (IRSDA), and a new focus: she wants to work toward eradicating rheumatic heart disease. Also known as a K award, the IRSDA gives early career researchers protected time to focus on research and engage in professional development activities, both of which, said Sims Sanyahumbi, are critical for anyone embarking on a global health path.

Her 2011-13 Fogarty fellowship led to her new award, said Sims Sanyahumbi. “The Fogarty fellowship helped me to build a foundation in research, and helped to solidify my research interests. It also smoothed the path to the award because without the experience of the fellowship, it would have been much more difficult coming to a different country and environment than I’m used to, and just hop in and perform research,” she explained.

As a fellow, Sims Sanyahumbi studied deficiencies in cardiac function in children with HIV. She also ran the pediatric cardiology clinic in Lilongwe, Malawi. As she examined sick children, she noticed that “every other child I saw had rheumatic heart disease,” she said. “Seeing so many children with such a devastating, completely preventable disease was heartbreaking, so I decided to help do something about it.”

Rheumatic heart disease occurs when a seemingly banal strep throat infection is not adequately treated with antibiotics. This can lead to a child developing acute rheumatic fever and, in some cases, rheumatic heart disease, which results in permanent damage to the heart valves. The disease forces the heart to work harder to pump blood and, over time, may cause heart failure. While rheumatic fever usually occurs in children aged 5-15, it can be years before any heart-related symptoms are evident.

The saddest aspect is that advanced disease can be prevented by low-cost monthly injections of penicillin, Sims Sanyahumbi said. Among the questions she will



### Amy E. Sims Sanyahumbi, M.D.

Fogarty Fellow:	2011-2013
Local organization:	UNC Project, Lilongwe, Malawi
U.S. organization:	Children's National Medical Center
Research focus:	Pediatric cardiomyopathy

seek to answer are whether poor adherence is to blame for the high number of children with rheumatic heart disease in Malawi.

She plans to register children with rheumatic heart disease in the capital city, Lilongwe, and then track their follow-up care for a year. After gathering and analyzing those data, Sims Sanyahumbi said she will look for barriers to and facilitators of care, and will work to develop a comprehensive strategy that harnesses mobile and eHealth tools to improve adherence in low- and middle-income countries (LMICs) like Malawi.

Another key goal is to train Malawians in pediatric cardiology, echocardiography, patient care and research practices. “There is one pediatric cardiologist in Malawi and there are an estimated 169,000 cases of rheumatic heart disease in the country,” she says. “Something that can be shared with my Malawian colleagues are the skills needed to better diagnose and care for these patients.”

Sims Sanyahumbi’s primary mentors are Dr. Peter Kazembe, the executive director of the Baylor HIV clinic in Malawi, and Baylor College of Medicine associate vice chair for research in pediatrics, Dr. Kristy Murray, in Houston, Texas. “While in Africa, I will have Skype meetings with my Houston team but having a strong mentorship team on the ground in Africa is also very important,” said Sims Sanyahumbi. The outcomes of her research are expected to benefit not only children in LMICs but also in the United States, where, although the incidence of rheumatic heart disease has declined to the point that it is no longer a notifiable disease, “We still see it, particularly in areas of high poverty or in places with a significant immigrant population,” noted Sims Sanyahumbi.

## PATRICIA GARCIA, M.D., M.P.H., PH.D.

*Dr. Patricia Garcia is a professor and former dean of the School of Public Health and Administration at the Universidad Peruana Cayetano Heredia (UPCH) in Lima, Peru, a position she has held since 2011 with a 15-month interruption to serve as her country's minister of health. A former Fogarty trainee, Garcia was the first woman to lead the Peruvian National Institute of Health and has served on a number of high-level WHO advisory committees. Garcia earned her master's of public health from the University of Washington, and her M.D. and Ph.D. from UPCH.*



### How did Fogarty shape your career?

It was through Fogarty's AIDS International Training and Research Program (AITRP) that I went to the University of Washington, where I was exposed to research and started my career as an infectious diseases doctor. As an AITRP trainee, I learned what makes an enabling environment for research, and when I returned to Peru, I was able to create one at Cayetano Heredia's School of Public Health. I believe that every single step you take in life shapes who you are, and the steps I've walked with the help of Fogarty were instrumental in helping me to achieve a great deal, including being appointed health minister and becoming the first doctor in my family.

### How did UPCH become a research powerhouse?

First of all, Fogarty gave many Peruvians the opportunity to train in the U.S. Second, we've been able to access numerous grants through Fogarty, including early career support that allows trainees to come back to Peru, and training grants that have allowed us to devise and implement our own programs. One Fogarty training grant allowed us to develop a program for medical informatics that is now used in Peru and more broadly in Latin America. Fogarty has also taught us to network more effectively by giving us the opportunity to interact with U.S. researchers.

### How has Fogarty advanced research in Peru?

One of the things I'm proudest of is that I helped obtain funding from Fogarty for several Peruvians who, as faculty members at Cayetano, are doing the same for the next generation. It's like having my kids, grandkids and great-grandkids with me at Cayetano—generations who have benefited from Fogarty training and are now doing research.

Fogarty's investment in Peru has been catalytic. Former Fogarty trainees laid the foundations for preventing and controlling HIV and STDs in Peru. We've introduced point-of-care tests. Medical informatics in Peru started at Cayetano with grants from Fogarty. One of those grants allowed us to create a center for training and research

in medical informatics for global health, which people from around Latin America have attended.

### How do you foster collaboration at Cayetano?

We've learned that promoting collaboration from the very beginning of people's careers teaches them to work together. Let me explain that by using the example of our Fogarty-supported project called *Kuskaya*—the word in *Quechua*, the language of the Incas, for "working together." *Kuskaya* brings together people from different disciplines, at least one of whom must be from the global south and one from the north. We've had projects that pair architecture and health, media and health, physical activity and health, cell phones and TB. Through a *Kuskaya* project run by a Fogarty trainee in the Amazon, called "Mothers of the River," women with solar-powered tablets are reducing maternal mortality in jungle communities.

### How do you share knowledge beyond Peru?

South-south cooperation is very important to us. People from Mexico, Bolivia, Venezuela, Colombia and Ecuador attend the Andean Center for Training on Medical Informatics. At the Latin American Association for STDs, which we created, we've been working with several countries on the introduction of rapid syphilis tests, among other issues.

We also do south-north cooperation—advising the U.S. on how to do things in developing countries. USAID recently contacted me to ask about our experiences in Peru with antiretroviral therapy. They're trying to change the system they use to provide antiretroviral therapy in Sudan.

And future generations of researchers and doctors from the U.S. come to Peru to train. Here in Peru, they encounter diseases they don't have in the U.S., so when they do see them back home, they know what to do. So we work with others as collaborative citizens of the world. That's what Fogarty trains us to be.

## Fogarty's adolescent research key to future good health

**T**he world is sitting on a global health time bomb as the largest adolescent population in history—1.8 billion youth—transitions into adulthood. HIV deaths among adolescents are rising, even as they decline for other age groups. AIDS-related illnesses claim more adolescent lives than any other cause except road accidents, according to UNAIDS. Adolescence is a time of risk-taking, when many social behaviors related to health—things like smoking, drinking, sexual behaviors and delinquency—are established. “It’s a time of a whole set of serious social transformations which are important for adolescents but really have major importance down the road,” said adolescent health specialist and long-time National Institute of Child Health and Human Development (NICHD) grantee, Dr. John Santelli of Columbia University. “Adolescents don’t die from tobacco use but if you wait 20-30 years, you’ll see the serious health consequences of teen smoking. And then, of course, in most of the world, adolescents rapidly become the parents of tomorrow. So their health, their well-being predicts the health of their children.”

And yet, until recently, the health needs of adolescents have been largely overlooked by the research community. “Adolescents are perceived by many researchers and

*Adolescents are often overlooked by health researchers but have unique health issues that require study.*

policymakers to be a healthy lot, with few pressing needs,” said Fogarty grantee, Dr. Monika Arora, director of the health promotion division at the Public Health Foundation of India—the country with the largest number of adolescents in the world. “But adolescent mortality has fallen at a slower rate than it has in children aged 0 to 9 years old, and the adolescent age group is the only one in which AIDS-related deaths are not decreasing.”

Adolescent research has lagged behind other age groups, in part because the factors that influence youth health—the conditions in which a person is born, grows, lives, works and ages—fall outside the health system. Called the social determinants of health, these include how long youth stay in school, how a country regulates tobacco and alcohol, child marriage, the poverty rate, and so on. Behaviors adopted during this time of life can impact youth in the short term, when they’re older, and influence the quality of life and health of the next generation.

Every year, more than 18 million girls, some younger than 15, give birth in developing regions, according to the WHO. Complications during pregnancy and childbirth are the leading cause of death for 15- to 19-year-old females globally and giving birth during adolescence has a negative impact on the future well-being of both mothers and infants.

Fogarty has long supported research into multiple aspects of youth health, from tobacco use to teen pregnancy and how it affects women’s health later in life, to HIV testing and care. Many Fogarty-funded projects take a multisectoral, life-course approach to adolescent health, looking not just at the clinical aspects of teen health but also seeking to address the social determinants that impact health from the time a child is in the womb through adolescence and into adulthood.

Photo courtesy of GHESKIO



Articles in this section by Karin Zeitvogel  
Resources: <http://bit.ly/AdolescentHealth>



*An expectant teenage mother is examined in Brazil as part of a Fogarty-supported study led by Dr. Catherine Pirkle of the University of Hawaii, Manoa.*

## Teen pregnancy has lifetime impact

Adolescent girls—some as young as 10—routinely give birth at the West African hospitals where Dr. Catherine Pirkle did doctoral research. “This clearly has long-term implications for their health—if they survive,” Pirkle said. “Pregnancy and childbirth complications are

the leading cause of death among 15- to 19-year-old girls globally, and women who give birth as adolescents seem to have particularly adverse health outcomes as they get older.”

A study of postmenopausal women from several countries found those who gave birth as adolescents had a higher long-term risk for cardiovascular disease than childless women or those who gave birth as adults. Armed with a Fogarty noncommunicable disease (NCD) grant for exploratory research, Pirkle set out to try to explain the relationship between teen birth and cardiovascular disease later in life. “It could be that exposing biologically immature organs to a high dose of estrogen can induce subtle changes to glucose metabolism, which might impact metabolic syndrome or diabetes,” she said. “Or it could be that the social consequences of adolescent childbearing are more pertinent: adolescent mothers drop out of school, have fewer economic opportunities and more

stresses in life. Being a teenaged mother, especially without adequate support, does not appear to be good for your health.”

Now an assistant professor at the University of Hawaii at Manoa, Pirkle has teamed up with researchers in northeastern Brazil to follow a pilot cohort of adolescent and adult women who are pregnant for the first time, from the start of pregnancy to six weeks postpartum. As part of the project, trainees are being given instruction on research practices, offered courses on epidemiological best practices, and provided specialized training in ethical research conduct when working with pregnant and adolescent women.

Building on the capacity developed with Fogarty support, Pirkle said she is planning a longitudinal cohort study to lay the foundation for a more comprehensive investigation of ties between adolescent childbirth and poor health in later years.

## Healthy habits in teens help reduce NCD burden

When teens see their movie idols light up on the big screen, they’re more likely to try tobacco themselves, Fogarty-supported studies indicate. This matters because tobacco use is the single biggest risk factor for developing an NCD later in life, and it’s a behavior often adopted during adolescence.

Among the Fogarty-supported studies to look into teen smoking, one, led by grantee Dr. Monika Arora, found a clear association between exposure to tobacco use in India’s popular Bollywood movies and teens taking up the habit. India is not only the country with the largest population of adolescents in the world, but also

one of four countries with China, Russia and the U.S., in which more than half of global tobacco-related deaths occur. Even after adjusting for demographic, social and family differences between the nearly 4,000 Indian teens who took part in the study, Arora found that the odds of using tobacco were more than double among teens who saw a lot of smoking in Bollywood films than those with low exposure to tobacco use in movies.

Those findings are not restricted to India. A study conducted in Argentina, with support from Fogarty and NIH’s National Cancer Institute, found that the more adolescents

saw actors smoke in U.S. and Argentinian films, the more likely they were to start using tobacco themselves. Researchers in India and Argentina have called for policy action on ‘film smoking,’ calling it an important, independent risk factor for smoking initiation.

Early use of tobacco is of concern because it predicts greater likelihood of addiction, longer lifetime use, and higher rates of lung cancer, said Arora. “Ensuring good health in adolescents brings economic and lifestyle benefits at the individual and national level and is vital to improving the health of future generations,” she said.

# HIV/AIDS a key battleground for teen health researchers

**W**ith AIDS-related illnesses claiming more adolescent lives than any other cause except road accidents, HIV has become one of the key battlegrounds for adolescent health researchers. A majority of adolescents who died of AIDS-related illnesses in 2013 acquired HIV from their mothers, but 40 percent of all new infections each year occur among adolescents in resource-poor settings, UNAIDS says. Most of those new infections affect girls, particularly those who are socially marginalized, live in poverty and have an unstable family life.

Exacerbating the youth HIV crisis is the fact that only a small fraction of the five million adolescents living with HIV globally have been tested for the virus. Youth who are unaware that they are infected do not seek care, don't begin antiretroviral therapy (ART), and may start or continue to have sex and transmit HIV.

## Haiti's teen HIV clinic boosts adherence

Haiti has the highest HIV infection rate in the Western Hemisphere, but only 9 percent of adolescent females and 4 percent of adolescent males know their HIV status. A Fogarty-supported project that recruited more than 3,300 adolescent slum-dwellers for HIV testing found that the prevalence rate among youth was 2.65 percent—nearly seven times higher than the estimated national

*Young adolescent girls read lesson books in Manila, Philippines.*

adolescent HIV prevalence (0.4 percent) and more than half a percentage point higher than adult prevalence (1.9 percent). Nearly three-quarters of adolescents who tested positive for HIV were female, according to an analysis of the data collected by researchers from Weill Cornell Medical College and the Haitian Study Group for Kaposi's Sarcoma and Opportunistic Infections (GHESKIO), who led the study.

Adherence to antiretrovirals is also low among Haitian adolescents. To overcome that, GHESKIO scientists led by Fogarty trainee, Dr. Vanessa Rouzier, turned sessions at a youth-specific HIV clinic that's been operational since 2009 into social events “with doctor stuff tagged onto the group gathering,” said Dr. Dan Fitzgerald, a longtime Fogarty grantee and the head of Weill Cornell Medicine's Center for Global Health, which for decades has partnered with GHESKIO to fight HIV/AIDS in Haiti.

A year after launching a pilot study of these mixed social and medical sessions, only around 10 percent of youth had dropped out of care, compared to around half before the peer group meetings were introduced. The pilot study has led to a larger project called FANMI—Haitian Creole for “my family”—targeting HIV-infected adolescent girls, “who we need to be tailoring our interventions for,” said Fitzgerald. Supported by NIH's National Institute of Child Health and Human Development (NICHD), FANMI delivers peer group counseling, social activities and clinical care to HIV-infected girls in a community center rather than a medical clinic.

FANMI and other youth-focused HIV projects are a recognition by GHESKIO that “we urgently need adolescent-specific strategies to help these youth cope and thrive with this disease, as well as prevent new infections in that group,” said Rouzier. With Fogarty support, GHESKIO is also building research capacity to prevent AIDS-related cervical cancer, of which Haiti has the highest incidence in the world. Researchers are being trained in all aspects of human papillomavirus (HPV) infections in teenage girls, including behavioral, social and ethical issues, and how to administer HPV vaccination programs for this at-risk age group.

## School: a powerful determinant

In Rakai, Uganda, poverty has fallen, high school enrollment has surged, and sexual intercourse initiation—an important risk factor for HIV, other sexually transmitted diseases, and unintended pregnancy—has been delayed, said Dr. John Santelli, leader of an NICHD-supported project that since 1994



has been collecting data on youth in this rural part of Uganda. The Rakai Adolescent Project has found that not being enrolled in secondary school was associated with higher prevalence of sexual experience and earlier initiation of sexual intercourse, especially among girls. “In many cultures, girls are married off to older men, who are much more likely to be HIV-positive,” said Santelli. “Being in school means that’s less likely to happen. Our study indicates that secondary school enrollment has a huge impact on HIV risk factors, incidence and prevalence.”

Fogarty-supported research in rural Nigeria has similarly found that keeping girls in secondary school provided them with “a socially acceptable alternative to early marriage,” said Dr. Daniel Perlman, one of the lead investigators on that project.

Across the Atlantic in Belize, which has the highest HIV prevalence rate in Central America, an in-school, peer-to-peer program helped promote HIV risk-reduction behaviors among adolescents. Fogarty-supported researchers trained teens to lead instructional sessions aimed at increasing knowledge of HIV among their peers. Seven weeks after the start of the intervention, adolescents who learned about HIV from the teen-educators had higher HIV knowledge and were more likely to use condoms than youth who went to control-group schools, where information about HIV/AIDS was provided through handbooks.

“Adolescents are a very high-risk group for HIV, but a lot of these children are not provided with even basic information about HIV,” said Dr. Don Morisky of the University of California, Los Angeles, the study’s



Stopping the spread of HIV among teens is a critical global issue that Fogarty-funded researchers are working to address.

principal investigator. “We need to harness peer-to-peer counselling more, especially for teens—they learn so much from their peers.”

### Stigma complicates HIV diagnoses for teens

Sub-Saharan Africa is home to the overwhelming majority of youth with HIV, many of whom acquired the virus perinatally. Fogarty grantee Dr. Dorothy Dow has been studying mental health issues that affect HIV-positive youth in Tanzania, such as stigma, suicide ideation, and, she discovered, the circumstances under which a teenager learns they have HIV. In one of many publications she has co-authored since she began working as a Fogarty Fellow and later grantee in an AIDS clinic in Moshi, Tanzania, Dow wrote that teens’ caregivers often shield them from learning they have HIV, fearing the child is too young to understand or that knowing they are infected would cause them distress. But 80 percent of youth interviewed for the study said they figured out on their own that they were HIV-positive. These teens were more likely to have mental health symptoms and poor adherence to antiretroviral therapy (ART) than teens whose HIV status was purposefully disclosed by an adult, said Dow. The study

“Adolescents are a very high-risk group for HIV, but a lot of these children are not provided with even basic information about HIV. We need to harness peer-to-peer counselling more, especially for teens—they learn so much from their peers.”

— DR. DON MORISKY,  
UNIVERSITY OF CALIFORNIA, LOS ANGELES

is believed to be the first to look at the impact on adolescents’ well-being of how, when and by whom a youth’s HIV status is disclosed to them. “It’s imperative to implement disclosure protocols early to reduce mental health difficulties, internal stigma, and promote ART adherence in youth living with HIV,” Dow said. “We need to focus more on telling kids early that they have HIV, and on getting HIV-exposed children tested and into age-appropriate care, where their health and psychosocial well-being are monitored.”

### RESOURCES

<http://bit.ly/AdolescentHealth>

# OPINION

By Dr. Roger I. Glass, Director, Fogarty International Center

## We have come so far, yet much remains to be done



As we mark our Center's 50th anniversary, it's appropriate that we take stock of our accomplishments and also remember our namesake, Rep. John Edward Fogarty. A member of Congress from Rhode Island, he was a staunch supporter of biomedical research

and under his leadership of the House appropriations subcommittee with responsibility for health, funding for NIH grew dramatically, from \$37 million in 1949 to \$1.24 billion in 1967. A bricklayer by trade, he was committed to improving health for everyone, at home and abroad.

"Time and again it has been demonstrated that the goal of better health has the capacity to demolish geographic and political boundaries," he said. "The nations of the world can and must share their knowledge and other resources so that people everywhere may have the blessing of better health, and through health, may move forward to new levels of peaceful productivity."

If Congressman Fogarty were looking down on us today, what would he think? How have things changed since he died in 1968? What gains would he notice? What challenges remain? And what are the new health problems that have emerged?

We have come so far, yet much remains to be done. For instance, in the 1960s, more than 16 million children died each year before reaching the age of five. Through vaccinations, improved hygiene and better medical care, the figure has dropped by more than two-thirds. And yet, 7,000 newborns around the world still die each day, and about five million children do not live to see their fifth birthday.

Another sign of progress is that the scourge of smallpox was eliminated in 1970. Polio, too, has been beaten back in most corners of the earth. And yet, despite our best efforts, isolated pockets of the virus continue to fester. And, even though we are armed with vaccines against cholera, outbreaks of that terrible disease continue in Haiti, Yemen, the Democratic Republic of Congo and elsewhere.

Another formidable challenge emerged in the 1980s, as HIV/AIDS swept across the globe. Back then, a positive diagnosis was a death sentence. Now, because of research advances, the disease can be managed with medication and we've discovered numerous ways to reduce its transmission.

A committed humanitarian, Rep. Fogarty would no doubt approve of the extraordinary effort the U.S. has undertaken with the President's Emergency Plan for AIDS Relief, by which Americans have funded new research and provided treatment for 13 million people each year, saving countless lives at home and in low- and middle-income countries. But we still have no vaccine or cure for HIV. And if its spread is not contained among adolescent girls and young women, the epidemic is unlikely to be stopped anytime soon.

On Capitol Hill, Rep. Fogarty would be pleased to see that the strong bipartisan support he helped build for the NIH has only grown stronger. And yet, if we are to maintain our competitive edge in biomedical research globally, to take advantage of genomics, imagine the use of cellphone technologies, big data and other promising developments, we must continue our research efforts to address the most compelling health problems.

We have come so far, yet much remains to be done. As we mark our 50th year, my staff and I are seeking advice as we ponder the road ahead. What are the most compelling research gaps and unmet needs? Where are the greatest scientific opportunities? How can we best move forward, together, as partners in our critical mission to improve health for all the world's people.

In returning to our namesake, the thoughts he expressed in the 1960s have never been more relevant. "In the wake of technological advances, the world has shriveled in size. The most distant places are only hours apart. When a child in Calcutta falls victim to cholera or a worker in Mexico contracts smallpox, the mothers of Providence and Kansas City and Los Angeles must be concerned," he said. "The life and well-being of a single individual is a richness beyond all value, a prize without price."



## Infectious diseases expert Redfield leading CDC

Dr. Robert Redfield, an infectious diseases researcher who contributed to the early understanding of HIV/AIDS, is the new CDC director. After retiring from the U.S. Army Medical Corps, Redfield co-founded the Institute of Human Virology at the University of Maryland. He previously served as a Fogarty advisory board member.



## Olsen appointed Peace Corps director

Dr. Josephine (Jody) Olsen has assumed leadership of the Peace Corps. A former volunteer, she has held numerous positions with the agency, including deputy and acting director. Olsen most recently was with the University of Maryland, Baltimore, as a visiting professor and faculty advisor for the Center for Global Education Initiatives.



## Global Alliance for Clean Cookstoves has new CEO

The Global Alliance for Clean Cookstoves, a public-private partnership hosted by the UN Foundation, appointed Dymphna van der Lans as its new chief executive officer. Most recently with the World Wildlife Fund, she has more than 25 years of experience managing and leading global development, energy and climate initiatives.



## Farrar to continue as Wellcome Trust director

Dr. Jeremy Farrar, who became director of the Wellcome Trust global research charity in 2013, has been appointed to a second five-year term that will start October 2018. A clinical scientist with research interests in infectious diseases and tropical health, Farrar previously directed the Oxford University Clinical Research Unit in Vietnam.



## CUGH recognizes Merson's global health leadership

The Consortium of Universities for Global Health honored Dr. Michael Merson with its 2018 Distinguished Leadership Award for his commitment to improving the health of populations worldwide. Merson, a former Fogarty grantee and advisory board member, was founding director of the Global Health Institute at Duke University.



## Adebamowo recognized by clinical oncology society

Fogarty grantee Dr. Clement Adebamowo has been named a Fellow of the American Society of Clinical Oncology and will be recognized at its annual meeting in June. A professor with the University of Maryland School of Medicine, Adebamowo is a cancer epidemiologist, whose projects include a research ethics training program in Nigeria.



## Longtime Fogarty grantee Mason dies

Dr. Peter Mason, a Fogarty grantee who developed a significant research training program in Zimbabwe, has died. In 1995, he co-founded the Biomedical Research and Training Institute (BRTI), an independent institution that he led for more than 20 years.

## NIH unveils plan for universal flu vaccine

To speed development of a universal flu vaccine, the NIH's National Institute of Allergy and Infectious Diseases has released a research plan focusing on three key topics: improving understanding of influenza infection; characterizing how immunity occurs and how to tailor vaccination responses to achieve it; and supporting the design of universal vaccines.

News release: <http://bit.ly/NIADflu>

## Framework will spur Alzheimer's research

The research community now has a new framework for developing a biologically-based definition of Alzheimer's disease. This proposed "biological construct" is based on measurable changes in the brain and is expected to facilitate better understanding of the disease process. The NIH's National Institute on Aging and the Alzheimer's Association convened the effort.

Journal article: <http://bit.ly/AlzFramework>

## NIH releases adolescent brain data

The NIH has released data from 4,500 participants of its Adolescent Brain Cognitive Development study. Approximately 30 terabytes of data—three times the Library of Congress collection—are now available to scientists worldwide to conduct research on the many factors that influence brain, cognitive, social and emotional development.

News release: <http://bit.ly/AdolBrain>

## New mental health data tools are available

The NIH's National Institute of Mental Health (NIMH) has added new interactive data visualization tools and sharing capabilities on its website to improve understanding of the impact of mental illnesses. The site includes statistics on prevalence and treatment utilization for mental illnesses, and possible consequences, such as suicide and disability.

Website: [www.nimh.nih.gov/statistics](http://www.nimh.nih.gov/statistics)

## Nursing Now campaign launched

Nursing Now—a three-year campaign to increase awareness of the role of nurses and midwives in global health—is a collaboration of WHO and the International Council of Nurses. The effort aims to boost investment in nursing, increase nurses' influence in policymaking, and improve dissemination of effective and innovative nursing practices.

Website: [www.nursingnow.org](http://www.nursingnow.org)

Funding Opportunity Announcement	Details	Deadline
African Postdoctoral Training Initiative - a partnership of the African Academy of Sciences, the Bill & Melinda Gates Foundation and NIH	<a href="http://bit.ly/AfricanPostdoc">http://bit.ly/AfricanPostdoc</a>	May 11, 2018
International Research Ethics Education and Curriculum Development Award (R25)	<a href="http://bit.ly/Ethicsop">http://bit.ly/Ethicsop</a>	May 17, 2018
International Bioethics Research Training Program (D43 Clinical Trial Optional)	<a href="http://bit.ly/EthicsD43">http://bit.ly/EthicsD43</a>	May 17, 2018
Global Infectious Disease (GID) Research Training Program (D71) (D43)	<a href="http://bit.ly/GIDplan">http://bit.ly/GIDplan</a> <a href="http://bit.ly/GIDtrain">http://bit.ly/GIDtrain</a>	Jul 26, 2018 Jul 26, 2018
Reducing Stigma to Improve HIV/AIDS Prevention, Treatment and Care in LMICs (R21 Clinical Trial Optional)	<a href="http://bit.ly/StigmaHIV2018">http://bit.ly/StigmaHIV2018</a>	Aug 1, 2018
Infrastructure Development Training Programs for Critical HIV Research at LMIC Institutions (G11)	<a href="http://bit.ly/FOGg11">http://bit.ly/FOGg11</a>	Aug 23, 2018
Planning Grant for Fogarty HIV Research Training Program for LMIC Institutions (D71)	<a href="http://bit.ly/FOGD71">http://bit.ly/FOGD71</a>	Aug 23, 2018
Fogarty HIV Research Training Program for LMIC Institutions (D43 Clinical Trial Optional)	<a href="http://bit.ly/HIVRTD43">http://bit.ly/HIVRTD43</a>	Aug 23, 2018

For more information, visit [www.fic.nih.gov/funding](http://www.fic.nih.gov/funding)

## Global Health Matters

March/April 2018

Volume 17, No. 2 ISSN: 1938-5935

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Department of Health and Human Services

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## Research!America honors Fogarty Director Roger Glass

Photo courtesy of Research!America



Fogarty Director Dr. Roger I. Glass was presented the 2018 Geoffrey Beene Builders of Science Award for his research and advocacy efforts in global health during Research!America's annual honors dinner on March 14. Glass was cited for his leadership of NIH efforts to transform African medical education, establish research training programs in West African countries that saw widespread Ebola infection, expand Fogarty's Scholars and Fellows program for early-career scientists, and help found the Global Alliance for Chronic Diseases. He was also recognized for his research on rotavirus, norovirus and cholera, and the recent WHO approval of a new low-cost rotavirus vaccine he helped develop over the last three decades.

The award was presented by Mara Hutton, vice president of the Geoffrey Beene Foundation, which was established to honor the late fashion designer, and support research in cancer and Alzheimer's Disease. Hutton noted that Fogarty is the most leveraged organization at NIH with nearly 90 percent of its grants receiving co-funding from other I/Cs and thanked Glass for his commitment to improving the health of the world's most vulnerable people. "He has a conscience for doing the right thing, he has empathy, tenacity, and his leadership reflects the best in the American scientific research community," she said.