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Nkengasong delivers Barmes Lecture 2024

By Susan Scutti

When asked by NIH Director Dr. Monica Bertagnolli what keeps him up at night, Ambassador Dr. John Nkengasong, presenter of the NIH Barmes Global Health 2024 lecture, answered unhesitatingly: "I fear that HIV fatigue can kick in, complacency can kick in, and if it does, the gains we've made may be quickly eroded." Nkengasong recalled the malaria eradication program the WHO initiated in 1955. It achieved some success though not as much as hoped. The turning point arrived in 1969. "The countries that had made gains saw a resurgence of malaria, and global interest faded." Financial support dwindled soon after, said Nkengasong.

The Barmes Global Health lecture series was established by the National Institute of Dental and Craniofacial Research (NIDCR) and the Fogarty International Center to honor the late Dr. David Edward Barmes' lifelong dedication to research aimed at improving health for those in low-income countries. The 2024 speaker, Dr. John Nkengasong, U.S. Global AIDS Coordinator and Senior Bureau Official for Global Health Security and Diplomacy—a role which includes leading the U.S. President's Emergency Plan for AIDS Relief (PEPFAR)—highlighted PEPFAR's achievements. In 2012, most PEPFAR-supported African countries reported less than 60% of people living with HIV on ART (antiretroviral treatment); a decade later, many countries are above 80% coverage. AIDS-related deaths have declined 68% since their peak in 2004. Overall, the rate of new infections has plummeted, but "we're not out of the woods," warned Nkengasong. PEPFAR's progress, though widespread, is uneven across the globe. "We have a series of countries—Kyrgyz Republic, Tajikistan, Papua New Guinea, and the Philippines—that we characterize as 'epidemics of concern,' countries where we see incidence increasing." In all regions, key drivers of transmission include people with undiagnosed HIV, those diagnosed but never treated, and those who interrupt treatment.

ChiaChi Charlie Chang/NIH

Ambassador Dr. John Nkengasong presented the David E. Barmes Global Health Lecture, warning of "HIV fatigue" setting over the global response to the epidemic.

Though hopeful, Nkengasong reminded the audience of the danger that HIV can get pushed to the background whenever other emerging diseases, such as COVID-19 or mpox, arise. Meanwhile, the HIV response is at a crossroads: "We need to think about financing, we need to finish the fight," said Nkengasong. "If PEPFAR was to stop today, you'd have an almost 400% increase in death rates."

Article series focuses on reciprocal innovation

As part of Fogarty's Center of Global Health Studies' Global Health Reciprocal Innovation project, a series of articles has been published as a supplement in *BMJ Global Health*. Sponsored by Fogarty and U.S. government partners the supplement highlights examples, successes, and challenges in the exchange of innovations between low/middle-income and high-income countries. Links to all articles can be found at go.nih.gov/GHRI_Articles.

FOCUS

Global health research mentorship today

We asked nine accomplished investigators about their experiences as global health research mentors and mentees. Each interpreted mentorship in a unique way.

Read more on pages 6 – 9

Can dismantling stigma reduce HIV rates in Nepal?

Three in 10 of the 11.3% of trans women in Nepal living with HIV do not seek care. This is often due to the stigma of being *Hijra*, or "the third sex." The Fogarty-supported Sweekar program aims to increase both HIV testing and treatment adherence by examining and addressing stigma faced by trans women in Nepal.

In ancient Sanskrit texts, *Hijra* are described as capable of bestowing both blessings and curses. "Every temple you go to you see trans people's images. They're seen as mystic and people treat them with both respect and fear," said Dr. Erin Wilson, senior research scientist, San Francisco Department of Public Health. In rural Nepal, however, most trans people experience exclusion from society and discrimination.

Nepal passed a law in 2007 to recognize those who identify as third gender, yet it hasn't stimulated much change in societal attitudes.

Regrettably, such stigma can lead *Hijra*, who are part of the larger trans women population in Nepal, to not seek medical care. Wilson and her colleagues are working on a stigma reduction intervention for Nepal's trans women community to increase their health care uptake. The project's name is "sweekar," which means "acceptance" in Nepali.

Methodology

Wilson believes PhotoVoice, a participatory research tool, can help change attitudes toward trans women at the individual, community, and society levels. Participants take and share pictures of the ways in which they're not accepted in Nepali society. For example, one trans woman photographed a boy with a water jug and explained that she'd never been permitted to perform this traditional female role (of getting water)—yet this boy was allowed. Wilson said, "It begins with getting the trans women together to talk about their experiences, to share how stigma manifests in their lives and what impact it has, and to find support with one another."

In addition to building empowerment, these photos will be used to launch a social media campaign aimed at changing attitudes within the wider society. Wilson and her Nepal research partner, the Blue Diamond Society, are working with the U.S. embassy to garner support from regional thought leaders as well. "Stigma research shows that when leaders have different values, people say, 'Maybe I should think about that.' It trickles down to society."

An attendee views photos at the Sweekar Photo Exhibit in Kathmandu, Nepal, which features snapshots taken by rural trans women from the Madhesh Province.

U.S. Embassy, Nepal

The Sweekar project also addresses HIV treatment and prevention. Many living with HIV in Nepal can only access a month's supply of medication at a time. Nepal is small (56,956 square miles, roughly the size of Michigan), but it is mountainous, so traveling is arduous and time-consuming, observed Wilson. "Every month, they have to travel for hours and then stand in a queue at a hospital and wait for their meds." Wilson's team is working with Nepal's National Center for AIDS and STD Control to facilitate wider access to multi-month dispensation.

"On the prevention side, we're hoping to implement HIV self-testing so patients can track their (and their partners') status," she said. "PrEP is still early in scale-up in Nepal. We need to start with the building blocks of getting and holding onto medications and getting access to testing."

Social change

Nepal passed a law in 2007 to recognize those who identify as third gender, yet it hasn't stimulated much change in societal attitudes. Most Nepalese live in multigenerational households and "being excommunicated from the family is traumatic. It's a collectivist society with no social safety net," explained Wilson. In Madhesh Province, where Wilson works, many trans women hide their identity to remain within their families; they present as men and have wives, and then travel to India and work as *Hijra*. "If they identify as third gender, they give up their rights to marriage, their rights to prior education, their rights to inheritance." Wilson said, "This Fogarty grant gives us the opportunity to understand the stigmatizing attitudes that the general population in Nepal have—can we measure and change those?"

When overweight and undernourished live under one roof

Childhood obesity is at an all-time high in the U.S., a trend mirrored across Latin America. The Childhood Obesity Prevention Across Borders project, coordinated by Fogarty's Center for Global Health Studies, brings together researchers from the U.S. and Latin America working on interventions to reverse this trend. Participants shared their results and lessons learned at a recent meeting.

A presentation by Amanda Thompson, professor at University of North Carolina (UNC), Chapel Hill, focused on a pattern seen in roughly 85% of Ecuadorian homes, where a dual burden of being overweight (or obese) and micronutrient deficiencies exists. Examples would be overweight adults living alongside children suffering from undernutrition... or overweight individuals who are also anemic. Studies record a lot of zinc deficiencies as well as anemia in this group, said Thompson. “Ecuador also has high rates of stunting.” (Children are described as “stunted” when their height-for-age is more than two standard deviations below median WHO values.)

Thompson, an anthropologist who specializes in human biology, has worked in the Galapagos since 2014. Her studies dovetail with the Peru-based research of Peggy Bentley, professor emeritus at UNC’s Gillings School of Global Public Health. The two wanted to hear from others working in Ecuador, Peru, and the U.S. Supported by a Cross Borders conference grant, their plans for a live meeting were disrupted by COVID-19 and political unrest in the region, so they hosted a hybrid event with many researchers joining online.

Multiple causes

The dual burden of overweight and undernutrition, though most often seen in middle-income countries, cuts across all nations, whether low-, middle-, or high-income. “There are similar causes and different causes across those contexts,” said Thompson. Lack of access to resources due to inequality is an important consideration. “In Latin America, we tend to see this dual burden focused in rural, lower-income, and indigenous populations. In the U.S., we would see it among racialized minority groups more than other groups,” she said.

Poor diet also contributes to this health problem, though an insufficient diet may not look the same in

People living in remote communities, like the Galapagos, often rely on food that is shipped in.

Photo courtesy of Amanda Thompson

all places. Environmental factors are another concern. Minimal access to clean water can lead to diarrhea or recurrent infectious diseases in children, which may, in turn, cause undernutrition, explained Thompson. “In Galapagos, people who are concerned about their water quality are more likely to consume non-water beverages,” said Thompson. Similarly, in the U.S., those who perceive their water quality as poor are more likely to consume sugar-sweetened beverages.

Meanwhile, some low- and middle-income countries are experiencing a surge of socioeconomic growth. “In Galapagos, you have this rapid expansion of the tourism industry, so people have considerably more income than generations before them or families on the mainland,” said Thompson. Greater purchasing power often translates to buying unhealthy processed food. Sometimes rapid urbanization occurs without the necessary infrastructure, noted Thompson. “More people are living in a densely urban environment without improvements in sanitation systems or access to clean water.”

Fresh outcomes

How this dual burden affects childhood development remains “an open question,” said Thompson. A welcome consequence of the conference has been a general desire for more collaborations. Thompson said, “The group in Peru has been doing long-term interventions and we've done a lot of interventions in the U.S. So how can we take what we've learned to think about an intervention that either focuses solely on Ecuador or on both Peru and Ecuador?” A search for appropriate grant mechanisms led the researchers to consider Fogarty training programs. “We’re strongly interested in building capacity.” Meanwhile, Thompson’s group has begun a small pilot study around childhood feeding and household diets. “This formative work with families will help us see the barriers they face, and we’ll work with them to co-create some potential solutions.”

PROFILE

Empowering women and children from Nepal to the Amazon

Dr. Lisa Labita Woodson's path to global health research began somewhat by accident. Initially she aspired to be a poet or an ecologist. Her journey took a dramatic turn after she joined the Peace Corps. Assigned as a science teacher to Nepal, she witnessed a tragic joint suicide of one of her students and their partner, which was due to an out-of-wedlock pregnancy. This experience compelled Woodson to seek mental health consultations and reproductive health education for her students.

She was eventually evacuated from Nepal due to civil unrest but went on to pursue a master's degree in global health at the University of Arizona, where she later earned her PhD. Her experiences in Nepal ignited in her a passion that led her around the world. In Senegal, she studied the feasibility of using potato starch as a dietary supplement during humanitarian crises. In Thailand, she researched HIV/AIDS knowledge among the Hmong tribal community. Later, a Fulbright Fellowship brought her back to Nepal to focus on health messaging from schools to households.

These experiences paved the way for Woodson's Fulbright-Fogarty Fellowship during her PhD work in Peru.

"I spent much of my career doing quantitative research, and I wanted to shift to qualitative research to learn something new. The Fulbright-Fogarty Fellowship was a great opportunity to expand my scope," she added.

Beginning her project in 2022 in the Peruvian Amazon, she aimed to understand the impact of COVID-19 lockdowns on school dropout rates and adolescent pregnancy. Partnering with Mamás del Río, an initiative that works to reduce maternal and infant mortality in remote communities in the Peruvian Amazon led by her mentor and former Fogarty Global Health Fellow and Scholar, Dr. Magaly Blas, Woodson focused on promoting equitable and sustainable access to essential health care for rural communities in the region.

The first phase of Woodson's project involved interviewing 41 individuals, including adolescents, and asking them, as part of the conversation, to draw their future aspirations. The drawings revealed compelling insights. Pregnant girls depicted occupations more traditionally held by women such as obstetricians, nurses, or teachers, while non-pregnant girls envisioned a broader range of careers including architect, engineer, and chef. Boys on the whole saw themselves in diverse roles, from doctors to tour guides, not limited to their Amazonian context. Interestingly, adolescents across all groups did not depict themselves as mothers or fathers. "The depth of information from those drawings was truly compelling," Woodson reflected.

Lisa Labita Woodson, MPH, PhD

Fulbright-Fogarty Fellow:	2022-2023
U.S. institution:	University of Arizona
Foreign institution:	Universidad Peruana Cayetano Heredia, Lima, Peru
Research topic:	The effects of COVID-19 on adolescent pregnancy and educational attainment in the Amazon Basin
Current affiliation:	Editor-In-Chief, Beyond Global Health; Principal investigator in sexual and reproductive health research, Mamás del Río

Woodson (left) interviews a woman in the Peruvian Amazon as part of her work with Mamás del Río.

Photo courtesy Lisa Labita Woodson

While Woodson and her team are hyper focused on the issues of reproductive education and health, the effects of climate change are simultaneously wreaking havoc on the communities they study, making the roadmap to intervention even more complex. During her time in the Amazon in 2023, Woodson was witness to the one of the most devastating droughts the Amazon has ever seen. This experience was pivotal in refocusing her efforts to understanding climate change as "[it] is affecting everything—women's health, reproductive health, food security—and is not being gender neutral."

Today, Woodson and her team distribute in the region informational booklets, tailored to adolescents, that include the data from her study as well as information about reproductive health and contraception. They're also engaging community leaders and health workers to develop locally viable interventions. Despite the challenges of working in isolated Amazonian areas, she is determined to find effective solutions.

"If we're moving forward in global health, we need to focus on empowering women, especially marginalized women," Woodson emphasized. "Focusing on women will change the life trajectories of their children and ultimately make a huge difference."

Q&A

AZEEZ BUTALI, PHD

Dr. Azeez Butali is a professor at the College of Dentistry, University of Iowa. After graduating as a dentist from the University of Lagos in 2000, he obtained a PhD in genetic epidemiology in 2010 and completed his postdoctoral training in craniofacial genetics at the University of Iowa. In 2014 he received an NIH Pathway to Independence Award from the National Institute of Dental and Craniofacial Research (NIDCR) to study nonsyndromic clefts in populations of African descent. Today he continues this research as principal investigator at the University of Iowa.

What led you to oral health research?

During my first dentistry internship at the General Hospital in Lagos, Nigeria, the first child I prepared for surgery had a cleft lip and palate. I became very close to that child and their family, which sparked my interest in the causes of cleft lip and palate. While considering my postgraduate studies, I discovered a program at the University of Dundee in Scotland, a WHO Collaborating Center for Congenital Anomalies in Oral Health, which aligned perfectly with my interests. There I focused on the contribution of maternal and environmental factors to cleft lip and palate. Shortly after I transitioned into my PhD, my mentor, Professor Peter Mossey, encouraged me to establish a similar research center in Africa. Recently I ran into that first child I treated for cleft lip and palate again in Nigeria. Now a young man, he expressed to me how happy he was that I had continued to dedicate my career to cleft research and told me about the impact that surgery had on his quality of life.

Tell us about the research centers in Nigeria.

As a PhD student, I set up eleven research centers across Nigeria to collect data and samples from individuals with cleft lip and palate. I trained clinicians to collect DNA samples for genetic analysis, with the plan to send these samples to the University of Iowa, where Professor Jeff Murray, a leading expert in cleft genetics, would analyze them for mutations that could potentially cause clef. I was later invited to Iowa as a visiting scholar where I discovered the first genetic variant for nonsyndromic clefting (a birth defect that occurs when the oral and nasal cavities don't fully divide but there are no other abnormalities) in an African population. During my postdoc, I worked on replicating findings from that first study where I focused on abnormalities in two genes, PAX7 and VAX1, both critical for the normal development of facial features in the early stages of human growth, and confirmed their involvement in clefting using samples from Asian and European populations.

Later, through funding from NIDCR, I expanded my research to Ghana and Ethiopia, allowing me and my colleagues to collect over 3,000 samples for the first genome-wide association study (GWAS) of cleft lip and palate in an African population.

How did you involve the community?

Following the expansion to Ghana and Ethiopia, we began to explore the ethical, legal, and social implications of our genomic studies. Interestingly, most patients wanted their results back, often intending to consult community leaders, religious figures, or others outside the health care system, which told us that we needed to engage with these community gatekeepers, providing them with the necessary education and training to support patients.

This is when we started to understand that many caregivers of children with cleft lip and palate experience significant mental health challenges. To better understand and address these caregivers' needs, we employed a study design called PhotoVoice. Caregivers took photographs representing their experiences, which they then shared and discussed with us. This method yielded deep insights into their daily struggles and coping mechanisms.

What are the future directions of your research?

Currently we are preparing to share our data on incidental genomic findings, the readiness of health care providers to return genetic results, and the willingness of patients to receive these results. We also plan to publish our mental health study results to inform better support systems for caregivers.

We're also organizing a photo exhibition in Lagos, as a part of the PhotoVoice project. We hope this exhibition fosters a deeper understanding of the experiences of caregivers of children with cleft lip and palate. We're hopeful we can also create peer mentoring groups. By supporting caregivers and addressing their mental health needs, we can enhance the overall well-being of both caregivers and their children.

Global health research mentorship today

An important aspect of Fogarty's mission is training the next generation of global health researchers. Senior researchers routinely work with trainees to help them acquire the skills, knowledge, and experience needed to conduct research that is aligned with the scientific goals of NIH and is relevant to the health priorities of collaborating institutions in low- and middle-income countries. Both teaching and mentoring are necessary aspects of the extensive education they provide.

There's a difference between teaching and mentoring. The word "mentor" comes from a character in Homer's *Odyssey*. Before leaving home to fight the Trojan War, King Odysseus asks his friend, Mentor, to teach and counsel his son, Telemachus, who will remain behind with his mother. While teachers provide instruction usually within a specific timeframe, mentoring is meant to be a longer-term, even life-long relationship.

To learn how mentoring works in the context of global health research, we asked nine accomplished investigators about their experiences. Many common themes emerged, including the bidirectional nature of these special relationships and the need for natural, open communication. Still, each interpreted mentorship in a unique way.

ANNETTE SOHN, MD, PHD

Vice president and director, TREAT Asia program (Therapeutics Research, Education, and AIDS Training in Asia), amfAR (The Foundation for AIDS Research)

Mentors have been incredibly catalytic at different decision nodes in my own life. I had an advisor during residency who had been an officer in the Epidemic Intelligence Service (EIS) program at the U.S. CDC. "You might want to look at it because you're interested in global health," he said, so I applied.

To me, a great mentor is someone who makes their mentees feel supported and respected, someone you remember for your lifetime. A mentor is someone without whom—had we not had that conversation, had they not made that phone call on my behalf—I may not be here doing the work I'm doing now. I've had mentors with whom just one conversation lit up my brain. And then there are others who hold your hand along the path. A mentor is responsible for how knowledge that is learned is applied in the professional life of their mentee.

Rie Yotsu of Tulane University (standing, middle) reviews data with mentees. "When people approach me for mentorship, I take time to discuss their goals."

Photo courtesy of Rie Yotsu

Everybody needs mentors, but the kind of mentors needed differs depending on the stage in our careers. And your relationship shifts over time, with mentees eventually becoming colleagues. How you grow with your mentor is a reflection of the strength of that relationship.

As a mentor, there are a few things that I regularly advise. One is that writing in scientific English is tough, another is that it's always okay to ask for help. If I'm looking at a group of mentees who are supposed to interact as part of their training, I want them to figure out how to make those relationships as effective as possible. "You want other people to get the best out of you, and you want to get the best out of them."

DON OPERARIO, PHD

Professor and chair, Department of Behavioral, Social, and Health Education Sciences, Emory University, Rollins School of Public Health

I was always interested in human behavior as it naturally occurs among people in their social, cultural, historical, political environments, and I was also interested in social psychology as a way to understand myself. I grew up in the 1980s and early 1990s, a transformative period in the history of public health as HIV evolved. My Fogarty project aims to promote HIV prevention and testing and is a collaboration with the University of the Philippines, Manila.

Mentorship is one of the most important components of having a career… and not always easy to come by. It's bidirectional, a true collaboration.

As a mentor, I must have awareness and sensitivity toward a mentee—their personal circumstance as well as geographic, cultural, economic, and social conditions that shape their professional development opportunities. I take my lead from mentees, while putting effort into learning about them and asking critical questions. My one mantra is: You have to find success on your own terms. Don't let other people—your mentors, advisors, institutions—define success for you. Also, mentorship doesn't have to be all consuming; a person can be a mentor in certain episodic or situational ways. Be open to finding mentors where you don't expect them. The older I get, the more I need mentors.

GABRIEL TRUEBA, DVM, PHD

Professor & director, Instituto de Microbiología, Universidad San Francisco de Quito, Ecuador

A great mentor is someone who changes you fundamentally, helps shape the way you see what making science is all about—how you approach conflicts, frustrations, or even successes that you have. Some of my professors completely changed the way I see all the underlying issues of the scientific work I do. I've remained friends with them.

It's important to understand the interests of the mentee. What is the main goal in their lives? When I mentor, I try to get them to understand the difficulty of becoming a PhD and a scientist. I also teach them about research ethics. The main difference when mentoring in the global health space (compared to other fields) is bioethics, working with human subjects. I spend a lot of time on bioethics—the respect you must have for the people involved in the studies and the responsibility of the data you're producing.

Mentees often don't understand the amount of failure involved when doing experiments—that's striking for many people. They always think that everything you do, you publish. That's not it. You have to do many trials until there is something that could be published. And then they are confronted by the response from journal editors, the response from reviewers—that is also shocking for some.

JAY GRAHAM, PHD, MBA, MPH

Associate professor in residence, environmental health sciences, and program director, Master of Public Health Program, University of California Berkeley

Some of my mentorships have lasted a long time—I still talk with my first MPH student from nearly fifteen years ago. Others I only hear from when they need a letter of recommendation. When I mentor someone, I always think, *I could one day be working for them,* so I try to create a level of respect.

I've had some awesome mentors. Dr. Joao Ferreira-Pinto, a behavioral health scientist, helped me think empathetically about other populations and focus on what I wanted with my life. When I got to Berkeley five years ago, we started a group called *The Surf Club*— just a random name. We were a bunch of junior faculty who'd meet and just talk, maybe problem solve, and sometimes invite speakers to come talk to us. Mentorship is about a network. You're not going to get everything you need from one mentor, so you need to devise a group of people that you're pulling from.

Culture and context affect mentoring, so you need awareness. Maybe you come from a high-income country, they're from a low- or middle-income country, and they feel the pay gap is unfair—which it is. Navigating those issues and being honest is important. You need to know your own weaknesses—what you're not catching. *What could I do to improve my mentoring? What would you have liked more of?* I may not be as aware as I think I am.

RIE YOTSU, MIPH, DTM&H, PHD

Associate professor, Tulane School of Public Health & Tropical Medicine, Tulane University

At the beginning of my career, I was a general surgeon. I always thought of doing surgeries as having skills, while dermatology was more about knowledge. But having knowledge is also a skill, I realized over time. I have been fortunate to have different types of mentors at various stages of my career, each fitting perfectly that particular career stage. During my dermatology training, I had a great mentor who pushed me to complete my dermatology license,

even though I was inclined towards global health. Having expertise in a specific field is crucial—I cannot imagine what path I would have taken without his guidance.

When people approach me for mentorship, I take time to discuss their goals. I look for three qualities. First, do they have respect? For example, if I wait in the Zoom meeting room but the mentee doesn't show up, that's not showing respect. Without respect, it won't work; I've tried but it doesn't work. The second quality I look for is passion. Some medical students in the U.S. just want to have a global health project to put on their CV. That's not enough. Third, I look for open communication. There was one student at Nagasaki University. Her English was poor, requiring me to edit almost all of her work initially, but she had these three qualities: respect, passion, and open communication. She's still working with me.

GRACE JOHN-STEWART, MD, PHD, MPH

Professor (epidemiology, medicine, pediatrics, & global health), University of Washington

I went to medical school and really loved clinical medicine, loved seeing patients, and then I applied for an infectious diseases fellowship. My mentor at the time thought I should become involved in this HIV project and maybe get an MPH. Actually, I was a little reluctant! As part of the fellowship, I went to Kenya to do research. It really hit home how population health impacts your understanding of transmission and ways to prevent it. I ended up doing a PhD in epidemiology and now all my work is in population health and clinical research.

The mentorship I received had a profound impact on me. My primary mentor during my infectious disease fellowship, Dr. Joan Kreiss, was meticulous and detail-oriented and taught me how to build careful research and how to think about research. She saw something in me that I didn't see in myself; this was very valuable to me and encouraged me to choose this path.

How you're mentored affects how you mentor others. Mentoring is quite different than teaching in that you get to work one-on-one. You have to understand your mentees to help facilitate their vision of what their next step will be. You might bring some experience or some wisdom, but they bring new ideas, so it's a catalytic and synergistic process.

I encourage my mentees to meet with me so we can form a closer relationship because nothing will happen without that. Some mentees are polite and don't want to "waste time," but mentorship only works when people feel comfortable coming and just brainstorming. Culture can affect the level of engagement.

CAREY FARQUHAR, MD, MPH

Professor (medicine, epidemiology) and acting chair, Department of Global Health, University of Washington

When I did my fellowship in infectious diseases at the University of Washington, I had my first great research mentor, Dr. Grace John-Stewart. Grace was critical as a mentor and shaped the way I currently do my research. She insisted on rigor and, more importantly, inspired a love of science, of asking the questions that matter, and of figuring out how to ask the questions that matter. Grace was living in Kenya, and she built friendships and bonds with her Kenyan colleagues and encouraged me to always do the same.

I've also been fortunate to have career mentors, where I say, *I've been offered this dean's office position, should I take it?* I tell my mentees: Get a whole bunch of mentors, because each will have a different perspective or meet different needs.

A mentor needs to believe in their mentees and care enough to prioritize their development and provide the time needed. Competence and commitment must be there, and also the ability to communicate in a way that is encouraging. Someone who's about my age was just telling me that 40% of NIH grants had been funded when he started, and now it's just 8%. Encouragement is needed now, more than ever. Mentoring others is a way that those of us who have worked hard and been fortunate can amplify our impact and bring along the next generation. By mentoring we can help carry the torch.

ILYA RASKIN, PHD

Distinguished Professor, Rutgers, The State University of New Jersey

Mentoring, particularly in the international arena, is a two-way street. It's based on our ability to learn from and enrich each other and adapt to individual culture, traditions, beliefs. The mentor's personality becomes very important. Role modeling becomes important. It's long-term; you not

only care about your students passing an exam, you care about their whole professional lives.

As a mentor, you need to understand the culture and whom you're mentoring. It's very important, particularly in the developing world, to make mentees comfortable.

This educational hierarchy where professors are gurus is very powerful. So first, you need to behave as a human being. You need to talk about yourself and ask them about their family, ask them about their lives. This icebreaking takes much longer in other cultures than here in the U.S.

You also need to understand what has been done there scientifically, the publications coming from the country. The internet totally revolutionized how we work internationally. I remember when we were shipping journals to Eastern Europe, when it was still under the Soviet Union. Those people had no access. There was this enormous informational gap. That has been nearly erased; now you can listen to lectures from Harvard, Yale, and MIT online… for free!

Do I think everyone needs mentorship? Frankly that's like asking, *Does everyone need parents?* We learn by example, even if it is subconscious.

Mentoring others is a way that those of us who have worked hard and been fortunate can amplify our impact and bring along the next generation. By mentoring we can help carry the torch.

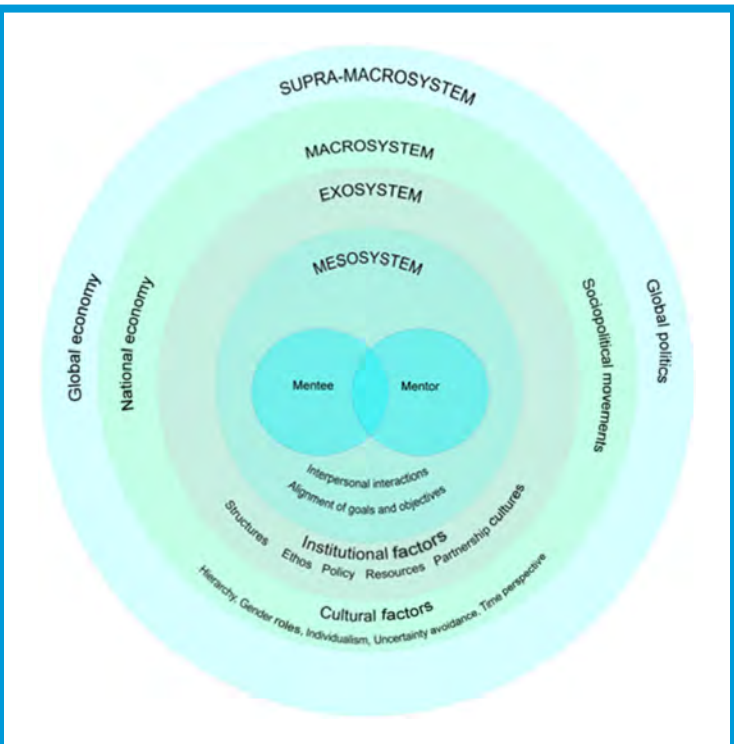
CHARLES WOOD, PHD

Professor, Department of Interdisciplinary Oncology, LSU Health New Orleans

When I was at University of Miami, I met a Fogarty fellow, Dr. Ganapati Bhat, a pediatrician at the University of Zambia. We started talking about HIV and cancers, and he told me about the cases of Kaposi's sarcomas he'd seen in children. This led to a collaboration in Africa in 1995. We wrote grants and were fortunate to receive funding from Fogarty and NCI—the first ever D43 HIV cancer research and training grant awarded.

When I was an undergraduate at the University of Kansas, a top scientist at Abbott Laboratories, the late Dr. Arthur Hirata, decided to join academia and I did my honors thesis project with him. We had lunch together every day and talked about science and life. He recommended me to the top lab in immunology at Columbia University and later for a postdoc in Switzerland with a top molecular biologist.

I believe mentorship is a one-to-one relationship. As a mentor, you have to have the mentee's best interests in mind and they have to be able to come to you for anything, either personal or professional. When mentees first start working with me, I watch over them and design everything for them. In the end, I expect them to know so much that they become my mentors. I tell them, *Only then will you really be ready to go out on your own.* Learning is never finished—new technologies, computers, AI—we need mentoring in each area.



Four concentric circles show the systems of interaction between the mentor and mentee in this visualization from a 2019 supplement to the American Journal of Tropical Medicine and Hygiene.

First circle (at center)
MESOSYSTEM. *Interpersonal interactions. Alignment of goals and objectives. Contains mentee and mentor.*

Second circle
EXOSYSTEM. *Institutional factors: Structures, Ethos, Policy, Resources, Partnership, Cultures.*

Third circle
MACROSYSTEM. *Sociopolitical movements. Cultural factors: Hierarchy, Gender roles, Individualism, Uncertainty avoidance, Time perspective. National economy.*

Fourth (outer) circle
SUPRA-MACROSYSTEM. *Global politics, Global economy.*

SOURCE: *Image adapted from Figure 1 of the publication, "Conceptual Framework of Mentoring in Low- and Middle-Income Countries to Advance Global Health." Courtesy Prasad et al.*

DIRECTOR'S COLUMN

By Kathleen Neuzil, Director, Fogarty International Center

Reflecting on My First 90 Days as Fogarty Director

It's hard to believe that I've already passed the 90-day mark as director of the Fogarty International Center. These first three months have been demanding, humbling, energizing—and most of all inspiring. Every day, I see tangible evidence of the impact of our work and the dedication of our staff, partners, and trainees. I feel privileged to be part of this incredible community.

I want to take a moment to thank Dr. Peter Kilmarx for his exemplary leadership over the past year. His tenure as acting director didn't just maintain operations: it expanded our networks and advanced and promoted Fogarty's mission for collaboration. His expertise, experience and compassion have been key to my onboarding, and I am grateful for his past and current service to our mission.

I was told before I came on-board that Fogarty is a special place, and that has proven to be true. I've learned so much in these first few months, and this has only reinforced my commitment to supporting research in low- and middle-income countries (LMICs) and training the next generation of scientists around the globe. In my view, the Fogarty mission has never been more relevant, and global scientific partnerships have never been more important, than in today's interconnected world. A diverse scientific work force and strong partnerships will be needed to combat the health challenges of our time and to ensure a resilient future.

Fogarty International Center

Neuzil (second from right) attended her first LAUNCH program orientation this summer. Pictured from left are former and current fellows: Evelyn Hsieh, Valeria Navarro-Galarza and Carla Villanueva.

In July, I had the pleasure of participating in my first LAUNCH (Launching Future Leaders in Global Health Research Training Program) orientation. LAUNCH is our flagship program for predoctoral students (scholars) and postdoctoral fellows. At the event, I met the grant recipients and mentors that run the seven individual consortia that participate in the program as well as program alumni and new U.S. and LMIC trainees. The excitement was palpable!

A recurring theme I've noticed among everyone I've met—trainees, partners, and Fogarty staff—is the hard work and sacrifices they've made that have led to Fogarty's success. This was especially evident during my visit to Kenya this August for the annual AFREHealth Symposium. AFREhealth is an interdisciplinary health professional group, supported by Fogarty/NIH, that seeks to improve the quality of health care in Africa through research, education and capacity building. At the University of Nairobi, I met with bright, energetic trainees. Their passion was contagious as they described projects spanning mental health, maternal-fetal health, and HIV and aging, among others.

While my time at Fogarty has already taken me around the world, I'm grateful that this move to NIH has allowed me to stay in my home state of Maryland. As Harriet Tubman, a great Marylander, once said, "Every great dream begins with a dreamer. Always remember, you have within you the strength, the patience, and the passion to reach for the stars to change the world."

In these first few months, I've seen firsthand how Fogarty has changed the world, and I'm confident we will continue to do so.

PEOPLE

Kallings, founding president of IAS, is mourned

Dr. Lars Olof Kallings, a pioneer in the global response to HIV, passed away on June 17th. Kallings founded the International AIDS Society in 1988 and served in key roles at WHO. His impactful career included leadership in infectious disease control and advisory roles for global AIDS initiatives.

Dhakal receives human rights award

Manisha Dhakal, executive director of Blue Diamond Society, Nepal's first and largest LGBT rights organization, was awarded the Elizabeth Taylor Human Rights Biennial award at the 2024 International Aids Society meeting. The Blue Diamond Society has partnered on several Fogarty grants to reduce HIV stigma in Nepal.

Taylor named ASTMH president

Dr. Terrie E. Taylor of the University of Michigan, a longtime Fogarty Global Infectious Disease grant recipient, was named president-elect of the American Society of Tropical Medicine and Hygiene. Taylor has studied malaria for over 30 years and founded the Blantyre Malaria Project in Malawi.

Former Fogarty Fellow elected to NAS

Dr. June Kwon-Chung was elected to the National Academy of Sciences in April 2024 for her discoveries about both benign and disease-causing fungi. Kwon-Chung began her NIH career as a Fogarty International Fellow in 1966 and has studied disease-causing fungi at the NIH intramural program for over 50 years.

IAS names new leadership team

The International AIDS Society (IAS) recently named Beatriz Grinsztejn from Brazil as IAS President and Kenneth Ngure from Kenya as President-Elect.

Grinsztejn, a leading infectious disease physician-researcher, co-founded FIOCRUZ HIV/AIDS Service, and has served as director of the HIV/AIDS Clinical Research Unit at FIOCRUZ for 25 years.

Ngure, a former Fogarty trainee from Kenya, is also an HIV prevention expert. He is co-lead on a randomized trial that evaluates how HIV self-testing might support PrEP delivery among men and women in Kenya.

Global HEALTH Briefs

Oropouche virus may cause stillbirths

Oropouche virus, which is transmitted by a pinhead-sized midge found throughout the Americas, may cause stillbirths and neurological defects in babies infected in the womb, reported the Brazilian health ministry. The Pan American Health Organization has asked other countries to watch for similar cases caused by the virus.

New test detects HIV strains in Africa

A multinational team led by Weill Cornell Medicine investigators developed a test to measure the persistence of HIV in people affected by viral strains found predominantly in Africa. Most HIV research has focused on strains circulating in Western countries. The study, published in *Nature Communications,* could help researchers achieve a globally applicable cure.

Chad eliminates threat of trypanosomiasis

Chad has eliminated the gambiense form of human African trypanosomiasis as a public health problem, according to the WHO. "Sleeping sickness" can cause confusion, sleep cycle disturbances or even coma, often leading to death. This is the first neglected tropical disease to be eliminated in Chad.

UNICEF, partners launch child health dashboard

Currently, 4.9 million children under 5 years old die every year; based on current trends, 59 countries will miss the UN's Sustainable Development Goal target for under-5 deaths. An updated global dashboard will shed light on various issues to help policymakers track progress on critical factors influencing children's health.

Trial confirms efficacy of twice-yearly PrEP

Lenacapavir, a long-acting HIV pre-exposure prophylaxis (PrEP), was found safe and 100% effective among cisgender women in Uganda and South Africa in a Phase 3 clinical trial, according to the National Institute of Allergy and Infectious Diseases. Lenacapavir, developed by Gilead Sciences, Inc., is administered by injection every six months.

Funding Opportunity Announcement	Deadline	Details
Global Brain Disorders Research R01 Clinical Trials Optional R21 Clinical Trials Optional	Nov 15, 2024	go.nih.gov/FogartyBrainResearch
Global Brain Disorders Research R01 Clinical Trials Optional (AIDS Research) R21 Clinical Trials Optional (AIDS Research)	Dec 9, 2024	go.nih.gov/FogartyBrainResearch
HIV-associated NCDs at LMIC Institutions R21 Clinical Trials Optional	Dec 9, 2024	go.nih.gov/HIV-NCDs

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

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In rare cases when a correction is needed after an issue's printed version has been finalized, the change will be made and explained in the online version of the article.

SCAN AND READ THIS ISSUE ONLINE

Fogarty to host meeting on humanitarian health & climate change

Are you a researcher studying health in humanitarian crises? Interested in how that intersects with climate change? Fogarty, Canada's International Development Research Center, and Elrha are collaborating to convene the second Global Forum on Humanitarian Health Research: GFH2R 2025.

GFH2R 2025 will include a series of public webinars starting in August 2024 and an in-person meeting in May 2025 in Nairobi, Kenya. The Forum seeks to bring researchers and humanitarian organizations (including NGOs, local policymakers, and international agencies) together to share experiences and promote collaboration around health research in humanitarian settings. The theme for GFH2R 2025 is *Health Research at the Nexus of Humanitarian Crises and Climate Change.*

The May 2025 meeting will be built around case study presentations by researchers from regions of the world affected by humanitarian crises. The Forum prioritizes the participation of researchers from low- and middle-income countries (LMICs), encourages networking and mentoring, and creates a venue for open and inclusive discussions.

Information on how to apply to attend the May 2025 meeting can be found online at: go.nih.gov/GFH2R