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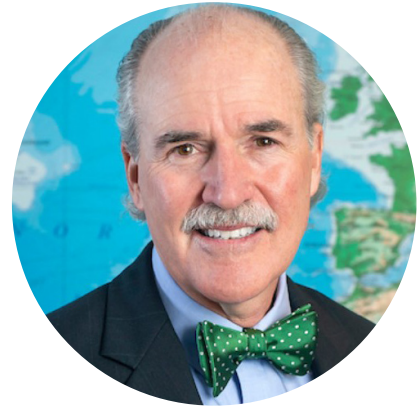
NATIONAL INSTITUTES OF HEALTH • DEPARTMENT OF HEALTH AND HUMAN SERVICES

Global Health Matters

FOGARTY INTERNATIONAL CENTER



Dr. Flora Katz, retiring DITR director, with Visiting Professor Dr. Christian Happi and members of the Fogarty community



The future of global health in the US

Generally, faculty and students on the campuses I visited are actively engaged in global health research and were eager to learn more about NIH's support for scientists both in the U.S. and in low- and middle-income countries (LMICs).

IN THE LAST COUPLE MONTHS, I've met with global health faculty and trainees at several U.S. universities—the University of Notre Dame, Brown University, Dartmouth College, Duke University, and the University of North Carolina at Chapel Hill. This experience has given me some new insights into their challenges and aspirations.

Generally, faculty and students on the campuses I visited are actively engaged in global health research and were eager to learn more about NIH's support for scientists both in the U.S. and in low- and middle-income countries (LMICs). Many of them had received Fogarty support, which had given them the exposure and experience to deepen their interest and skills to take their careers to the next level. Several faculty were from LMICs and are now based at U.S. universities with ongoing collaborations in their countries of origin.

A few common themes arose. These U.S.-based researchers want more equitable partnership in their LMIC collaborations, moving beyond the era of the U.S.-based researcher developing the research question and securing the funding. They view the current model as putting the LMIC co-investigator in a less-advantaged position in outlining the scientific priorities, managing resources, and serving as first and last (senior) authors on publications. Fortunately, investigators are well-positioned to center co-leadership in their research collaborations.

Another concern has been when early-career U.S. scientists with relatively little training and experience make short visits to LMICs to provide expert guidance in these settings. There is a historic perception that the flow of expertise was unidirectional – from the U.S. to the LMICs. To counter this in recent

Fogarty trainees learn in a classroom in Ethiopia.



years, there is increasing recognition and support for what is called reciprocal innovation, with co-creation and bilateral flow of ideas and new interventions between the U.S. and LMICs.

Lastly, there are questions about the definition and the future of global health. For the U.S. researchers, their work in LMICs is considered “global health.” But from the perspective of their LMIC colleagues, the field is simply “health.” There have been many recent calls to “decolonize” and reimagine global health for the 21st century.

There was a marked increase in global health at U.S. universities in the 2000s, but there are now some indications that the interest in global health among U.S. trainees has peaked. For some training programs, there are still plenty of highly qualified U.S. applicants but fewer than in previous years. And in some U.S. global health master’s degree programs, many or even most of the applicants and students are now foreign nationals, mainly from LMICs.

While in North Carolina, I was the keynote speaker for the annual meeting of the North Carolina Global Health Alliance. This is a vibrant meeting with hundreds of attendees from the many world-class institutions in the state. Reciprocal innovation was the explicit theme, “exploring how global learnings can be

adapted to and from local North Carolina settings.” I met with poster presenters reporting on issues such as violence against children and support for breastfeeding in rural North Carolina. I asked them why they were presenting at a global health conference; they said they were in global health master’s degree programs, but their practicum projects were based in North Carolina. Two of the trainees had come from Africa to study health challenges here in the U.S.— opposite of the usual U.S. trainee going to Africa to study challenges there. They said they were proud of their contributions in North Carolina and the skills they had learned would transfer well back to their home countries.

It was striking to see the emerging contours of a re-envisioned global health, in which a bidirectional flow of faculty and trainees address common health challenges with equitable relationships and mutual respect between U.S. and LMIC researchers and institutions. In this model, U.S. universities will continue their critical role as beacons of scientific inquiry and service to the global community. And Fogarty will continue to support global health research partnerships and capacity strengthening as these new models of collaboration continue to evolve.

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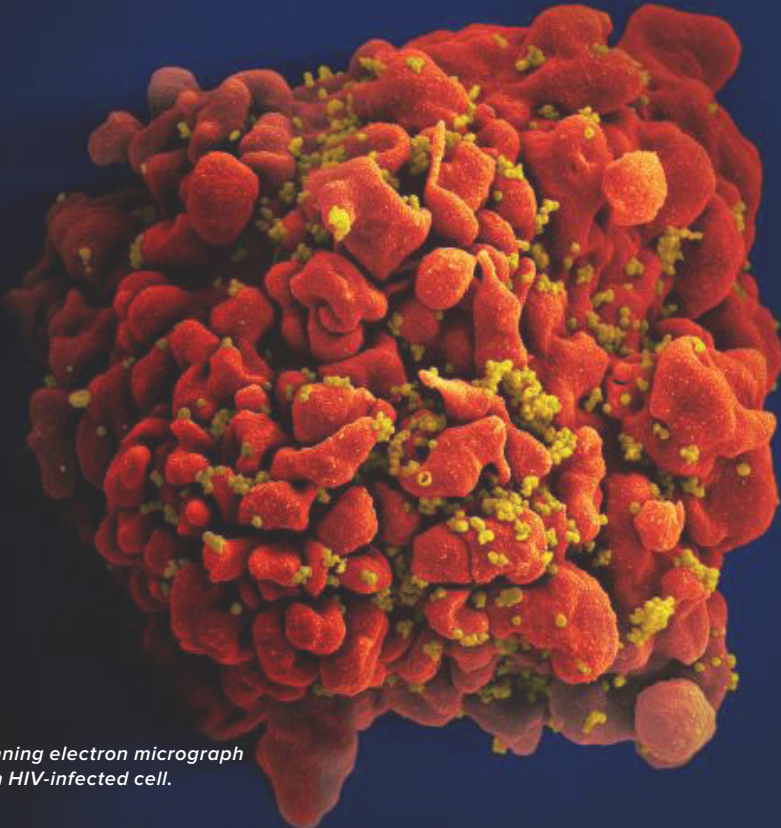
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The Fogarty International Center is dedicated to advancing the mission of the National Institutes of Health by supporting and facilitating global health research conducted by U.S. and international investigators, building partnerships between health research institutions in the United States and abroad, and training the next generation of scientists to address global health needs.

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profile



Scanning electron micrograph of an HIV-infected cell.

BOTSWANA PROJECT EXAMINES INTERSECTION OF HIV AND BREAST CANCER

When Dr. Arthur Johnson began his research on breast cancer treatment among HIV-positive women in Botswana, he anticipated challenges. But the reality of the barriers these patients face was eye-opening to him. “It was amazing how many women wanted

to take the medication,” he said. “The problem was they couldn’t always afford it or find it. They want to follow the doctor’s recommendations, but other limitations hold them

back.” Currently based in Sweden, Johnson is a general surgeon at Kalmar Region Hospital. His path to global health research was unique and even included a four-year stint

Arthur Johnson, MD

Fogarty Fellow
2022-2023

U.S. institution
University of Maryland

Foreign institution
University of Botswana

Research topic
Breast cancer treatment for
HIV-positive women

Current affiliation
General Surgeon, Kalmar Region
Hospital, Sweden

in the United States Navy. Johnson joined the military through the Health Professions Scholarship Program (HPSP), a program that provides funding for medical school in exchange for service. His role as a Navy surgeon included a year on an aircraft carrier, and later, a deployment to northern Iraq during the COVID-19 pandemic, where he served through the end of 2021. Reflecting on his time in the Navy, Johnson said it instilled a strong sense of resilience and adaptability—qualities that truly prepared him for his Fogarty project in Botswana.

Johnson studied in Botswana as a Fogarty Fellow through the INSIGHT program in 2023. In part, his project, “Impact of HIV on outcomes in women with breast cancer receiving tamoxifen in Botswana,” focused on adherence to tamoxifen, a common breast cancer drug, among women with HIV. In the U.S. and Europe, adherence has often suffered due

to patient side effects, such as hot flashes, weight gain and edema (fluid retention), but Johnson was surprised to find a strong willingness among the women in Botswana to follow prescribed regimens despite the difficulties.

As a Fogarty fellow, Johnson was affiliated with INSIGHT, a consortium between The University of Maryland, the University of Alabama at Birmingham, Baylor College of Medicine, and the University of Pittsburgh, and he also collaborated with the Botswana-Harvard Partnership. He mined their repository of HIV data, one of the largest in the region, to investigate survival outcomes among HIV-positive women receiving tamoxifen for breast cancer. He also analyzed data from a longitudinal database on patients living with HIV and cancer in Botswana, aiming to better understand whether tamoxifen use affected survival rates.

“Women living with HIV diagnosed with estrogen-receptor positive breast cancer are at increased risk of dying compared with HIV-negative women. The reasons for this are unknown,” explained Johnson. What has been documented is that efavirenz, an antiretroviral therapy (ART) for HIV often used in sub-Saharan Africa, interacts with estrogen. So Johnson and his colleagues decided to explore the effect of this ART on estrogen-receptor positive breast cancer survival.

While his initial project plans

included conducting patient interviews and collecting blood samples, he had to pivot after encountering regulatory delays and logistical obstacles. “I initially envisioned interviewing patients and taking blood samples, but once there, I realized I had to scale back,” he said. “You make plans and then realize, ‘Well, that’s not practical.’”

Johnson ultimately found that tamoxifen did not appear to have a significant impact on the survival rates of HIV-positive women with breast cancer. Given his small sample size (due to limited resources), this is considered an “inconclusive” finding and so underscores a key challenge for those working with less than optimal resources: a “conclusive” conclusion, if applied, could drive real improvements in patient care.

During his time in Botswana, Johnson recognized the importance of local mentorship. While he collaborated with the Botswana-Harvard Partnership and received support from mentors at Baylor University,



Dr. Johnson contributes to finding ways to reduce the burden of breast cancer morbidity and mortality in Botswana, sub-Saharan Africa and globally.



For his Fogarty project, Dr. Arthur Johnson worked with colleagues at Princess Marina Hospital, a district hospital in Gaborone, Botswana.

Photo courtesy of Arthur Johnson

it was the guidance of those on the ground that proved invaluable. “Your mentor on the ground is your most valuable resource,” he said. “The plans I made with mentors from afar sometimes didn’t align with the realities in Botswana, which my local mentors helped me navigate day-to-day.”

In Sweden now, Johnson is working to integrate global health research into his clinical career while pursuing his Ph.D. Although Sweden has fewer resources allocated for global health initiatives than the U.S., he remains determined to continue his work. “I’ve got a few lingering projects in Botswana,” he shared, “and I hope to keep exploring new ways to improve outcomes for patients in low-resource settings.”

“YOUR MENTOR ON THE GROUND IS YOUR MOST VALUABLE RESOURCE.”



DR. FLORA KATZ'S IMPACT ON DITR...AND FOGARTY



Photo courtesy of Fogarty International Center

From left to right: Nalini Aland, Linda Kupfer, Rachel Sturke, Josh Rosenthal, Flora Katz

Dr. Flora Katz will retire from her position as Director of the Division of Training and Research (DITR) in January 2025. DITR aims to build the scientific research pipeline across the globe by administering grants and fellowship programs at sites in more than 100 countries. Its impact is felt both at home and abroad.



FOGARTY'S PEER-REVIEWED RESEARCH GRANTS are designed to be collaborative, long term and flexible. About two-thirds of the awards support research training, while the remaining third focus on scientific discovery.

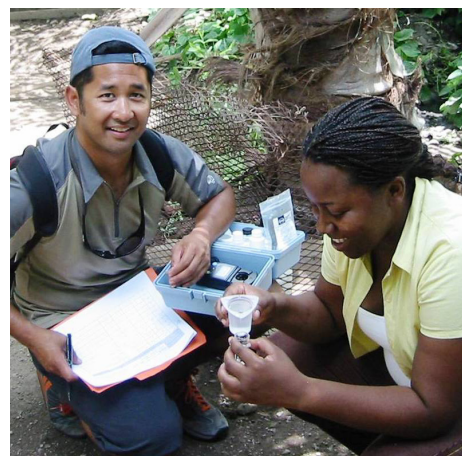
Grants serve as the building blocks for DITR's programs. Research training programs focus on infectious diseases, such as HIV/AIDS, TB and malaria; chronic conditions, including cancer, heart disease and diabetes; trauma and injury; and bioethics. DITR's scientific discovery programs also highlight a range of topics, including brain disorders; mobile technologies and health (mHealth); ecology and evolution of infectious diseases; environmental and occupational health; HIV and stigma; and HIV and non-communicable co-morbidities.

Nearly a quarter of DITR's grantees are research institutions in low- and middle-income countries. The remaining awards support scientists at U.S. institutions who collaborate with colleagues in lower resource regions.

Flora Katz's impact

Dr. Flora Katz began her career at Fogarty as a program officer in

2001 and gradually assumed greater responsibility within DITR over time. Her portfolio has included a wide spectrum of programs; she directly managed 12 different programs (starting five from scratch), and facilitated, advocated, revised, reimaged or developed many others. "One of the lovely things about Fogarty is, if you have an idea, you get a lot of support to develop it."



UCSD Framework program trainees.

Three projects are of particular importance to Katz

The International Cooperative Biodiversity Groups (ICBG)

program had been ongoing for nearly 10 years when she arrived at Fogarty and began co-leading it with Dr. Josh Rosenthal. (Eventually Rosenthal, who is now a Fogarty Senior Scientist, moved on, and Katz took over ICBG.)

"It was a fascinating, interdisciplinary program that tied drug discovery from natural products to incentives for countries to conserve their biodiversity," says Katz. "You had to bring in many different players, including the policy community, while creating public-private partnerships with pharmaceutical companies. It was a constant learning curve and very complicated: How do you compensate countries for use of their biodiversity?"

Starting in 2006, Katz began to construct a collection of "**Framework Programs**, in response to global health becoming relevant and gaining urgency for the younger generation. "We used that tipping point to offer an opportunity to institutions in the U.S. and LMICs to develop curricula around global health—framework programs," she said. In the initial educational program, stipulations included that at least three distinct departments collaborate on and jointly teach the curriculum. "With multiple perspectives in the room, the students would understand that many scientific viewpoints were needed to solve some of these global health problems." Projects were wildly diverse, with most featuring components in public health and medicine, but "with engineering and communications and arts and whatever you can think of also added to the mix," recalled Katz. "Everybody wanted to register for these courses, 300 or 500 people would sign up, it was unexpected and overwhelming." Some

Photo courtesy of Richard Lord

"ALL ORGANIZATIONS KEEP MOVING FORWARD AND THE AREAS OF EMPHASIS MAY EVOLVE SOMEWHAT, YET WE BUILD ON OUR SUCCESSES."

universities institutionalized these programs and continue them today.

The final program Katz highlights is **her sequel to the Medical Education in Africa (MEPI) program**, which was built with funding from PEPFAR and the NIH Common Fund: **MEPI Junior Faculty (MEPI Jr)**. “We asked those involved in MEPI, ‘What’s missing?’ They told us, ‘We have a lot of junior faculty with PhD degrees, but they’re not doing any research—they’re an untapped resource.’” Katz responded by creating MEPI Jr, which funded former MEPI institutions to provide fellowships across at least three topic areas.

“Almost all 11 of the grantee institutions offered two-year fellowships so junior faculty could do mentored research and learn career development skills as a cohort.” Cohort mentoring turned out to be extremely effective. Katz also welcomed an unanticipated outcome. “What happened was they organically developed a real multidisciplinary in their projects, they began to cohere as a multidisciplinary community in a way that I never could achieve in the previous 10 years of trying to force it! I probably learned more from that program than any other.”

Behind the scenes

Katz has accolades for three additional DITR achievements, though her role in each was limited to advocate and facilitator. “The Emerging Global Leaders Award (K43) is an important program since it’s the only career development program at NIH that



2017 MEPI trainees in Mozambique.

Nearly a quarter of Fogarty awards are made directly to robust research institutions in the developing world.

allows non-U.S. nationals to be supported. It’s a major DITR achievement in the last 10 years.”

A second triumph is the Mobile Health (mHealth) program, which rose from the ashes of a failed Common Fund proposal that Katz had worked on. “Fogarty Director Dr. Roger Glass was extremely enthusiastic, so we decided to do it ourselves.” Katz hired AAAS Fellow Dr. Laura Povlich to develop the program, which aims to build an evidentiary base for using mHealth as a telemedicine technology (reminding people to do something) or as a medical device (providing point of care diagnostics or ultrasound in a distributed manner).

One final noteworthy DITR accomplishment is a Common Fund initiative, Data Science for Health Discovery and Innovation in Africa (DS-I Africa). Katz was very involved in putting together the planning committee and writing the proposal, though others, notably Povlich, now a program officer, developed and managed it.

DITR’s future... and past

Fogarty Deputy Director Dr. Peter Kilmarx recognizes that Katz will be difficult to replace, yet he doesn’t see any need to make substantial change within DITR. “We have limited capacity resources so most go to the strongest applicants and centers of excellence and countries that we’ve

assisted in the past,” he says. Still, he recalls how the department under Katz’s leadership provided funding for capacity building in Sierra Leone, Guinea and Liberia during and after the West African Ebola outbreak of 2014-16. “Just as we did in West Africa, we will try to build capacity in countries that haven’t been as successful or with lower levels of capacity,” he says.

As she looks back on her 23 years at Fogarty, Katz primarily sees constancy over time. “One major thing is we went from paper to electronic, which changed a lot of processes for everyone, but Fogarty’s mission has never changed,” she says, adding, “All organizations keep moving forward and the areas of emphasis may evolve somewhat, yet we build on our successes.” DITR’s earliest HIV/AIDS programs, which spawned a plethora of efficacious projects and programs, are a case in point.

Fogarty’s mHealth program aims to build an evidence base for the use of cellphone technologies and procedures.

Photo courtesy of Richard Lord



Dr. Flora Katz receives a Director’s Merit Award from Former Fogarty Director Dr. Roger Glass.

Photos courtesy of Fogarty International Center

“ EACH OF US WHO HAVE BEEN HERE FOR A LONG TIME HAVE WATCHED HOW A TRAINEE IN OUR ORIGINAL PROGRAM IS NOW THE HEAD OF AN IMPORTANT INSTITUTION IN THEIR COUNTRY. WE’VE SEEN PROMISING INSTITUTIONS BECOME POWERHOUSES. CAPACITY BUILDING IS A VERY SLOW PROCESS, YET WE DO SEE PROGRESS ON A LONG TIMESCALE.”

Q&A



Dr. Flora Katz, who joined Fogarty in 2001, will resign her position as Director of Fogarty’s Division of Training and Research (DITR) in January 2025. Katz received her Ph.D. from the Massachusetts Institute of Technology in cell and molecular biology and trained in neurobiology at Columbia University and genetics at the University of California, San Francisco. As a faculty member, she directed a laboratory in developmental biology and neurogenetics for 15 years at the University of Texas Southwestern Medical Center and Texas A&M University. She’s also conducted research on wildlife conservation and biology in Malawi, Zambia, Israel, and Indonesia.

Why become a scientist?

I’ve always been interested in animals, and I really enjoyed my biology courses in high school. Then in college, I wanted to be a writer so I thought “English literature,” but it seemed to me you can always read, you don’t really need to go to a class for that. I wanted to do something that involved an apprenticeship, so I switched my major to biology.

In college, I’d just had one course in molecular biology—and I was fascinated by it. After college, I studied migrating birds in Zambia and elephant populations in Malawi for a while, yet when I was wandering around following animals, I felt I needed something a little more intellectually stimulating. I decided to go back to graduate school in biology at MIT.

Any highlights from your time in academia?

After graduate school, I took a fellowship to work in Indonesia. As part of that work, I studied sign language in feral orangutans in Kalimantan, which got me interested in language and learning. When I returned, I first worked with Eric Kandel at Columbia University, who subsequently won the Nobel Prize for his research on learning and memory in *Aplysia* (a type of sea slug), and then with Yuh Nung and Lily Jan at UCSF, to study neurodevelopment in fruit flies. When I set up my own laboratory, I worked on a project that was difficult, but absolutely fascinating: How do the cells in the eye hook up with the brain during development so that an organism can see? It’s still an incompletely solved problem.

Why focus on global health?

I wanted to be in Washington for a year for personal reasons. I applied

for the AAAS fellowship with no idea exactly what kind of jobs would be available, I just wanted to apply my scientific knowledge to the government. I interviewed for a number of positions, but I didn’t think there was enough science in any of them, so I decided against them. Then I got a call from Josh Rosenthal; he said the person they’d selected to work with him on Fogarty’s International Cooperative Biodiversity Groups (ICBG) program had turned down the offer. Going back through the list, they thought I’d be a good match.

I said, “I’m ready!” And he said, “What?” The AAAS candidate who’d turned down the position had already told me everything about this placement during interview week, and I’d thought, then, it would have been perfect for me. With the ICBG I knew I’d work on drug discovery for many scourges ravaging the world and at the same time, I’d work on biodiversity conservation, my long-time passion. I had a molecular biology and cell biology background to apply to drug discovery, plus a lot of experience with wildlife biology, ethnomedicine and conservation. All of the things I’d spent years focusing on came together in one package at NIH, a candy store for science... amazing! So I came to Fogarty for the AAAS year and, when they offered me a position, immediately shut down my lab in Texas and moved.

Dr. Christian Happi talks infectious disease in Africa

The National Institutes of Health community collectively nominates speakers for the NIH Director's Wednesday Afternoon Lecture Series, affectionately known as WALs. Because these lectures help keep scientists on campus abreast of research advancements, presenters include various leaders of biomedical and behavioral research. One such scientist is Dr. Christian Happi, who discussed genomic surveillance in West Africa for his WALs lecture on the final Wednesday in October.

Influence through teaching

Happi's research career, which began at Harvard, investigates human infectious disease genomics and focuses on host-pathogen interactions. In 2013, he helped establish the African Center of Excellence for Genomics of Infectious Diseases (ACEGID) at Redeemer's University in Nigeria with funding from the NIH and World Bank. There, he made several important contributions to infectious disease epidemiology.

"Of my career accomplishments to date, the most meaningful was my use of genomics technologies for early diagnosis and confirmation—within 6 hours—of Ebola virus disease in Nigeria," he stated. His work helped contain the spread of disease in Nigeria, saving millions of lives during the Western Africa Ebola epidemic of 2013-2016. Now, he's director of ACEGID, which has trained more than 2,000 scientists from 53 of Africa's 54

countries. ACEGID, a WHO reference center for infectious diseases, was also where Happi became the first African researcher to use next generation genomic technology to sequence the SARS-CoV-2 virus—within 48 hours of receiving a sample from the index case in Nigeria.

Alongside a powerful biodiversity, Africa is blessed with great natural and human resources. To take advantage of this strength, ACEGID aims to equip a critical mass of people with the scientific knowledge and skills needed to establish a vibrant research environment.

Happi noted that the Ebola outbreak was ACEGID's "first baptism by fire." At the start of the outbreak, diagnostic tests took too long—often 96 hours or more—so patients who appeared in clinic would return home before receiving a diagnosis. In some cases, those who had Ebola would unknowingly transmit the infection to others in the community.

Happi's Ebola rapid diagnostic test (RDT) solved this essential problem, and Nigeria was able to quickly contain Ebola, limiting the total number of in-country cases to just 20.

Following the Ebola outbreak, Happi and his team used CRISPR technology to create a RDT for Lassa Fever, a viral hemorrhagic fever endemic to parts of West Africa. "We also created a tool, Delphy, to help public health decision-makers respond in real time to infectious disease." Carmen, a more recent platform based on CRISPR technology and developed by ACEGID, can analyze up to 49 different pathogens



Dr. Christian Happi, PhD

Photo courtesy of NIH

in a single test, said Happi. "We believe this is going to be a game-changer."

Augmenting infrastructure

Using genomic data to create tools that can be used in the field is only half the battle, explained Happi. Enhanced African infrastructure is also needed. To that end, he continues to work towards establishing a network of 30 genomic centers of excellence across the continent. He also aims to enhance Africa's manufacturing prowess in the areas of diagnostics, vaccines and therapeutics. Happi, a long-time Fogarty grantee, has also been supported by the National Human Genome Research Institute (NHGRI), the National Institute of Allergies and Infectious Diseases (NIAID), the National Institute of Biomedical Imaging and Bioengineering (NIBIB), and NIH's Office of the Director (OD).

"WE REALLY WANT TO GO BEYOND WHERE WE ARE NOW. LET'S BE TRANSLATIONAL, LET'S USE THE INFORMATION AND THE KNOWLEDGE THAT WE HAVE FOR WHOLE GENOME SEQUENCE DATA AND INFECTIOUS DISEASES RESEARCH TO CREATE THE NEXT GENERATION DIAGNOSTICS AND DRUGS."

Fogarty at UNGA Science Summit 2024

BY MARIAH FELIPE-VELASQUEZ

Every fall, members of the United Nations General Assembly (UNGA), the UN's main policy-making body, convene in New York City to discuss pivotal issues affecting the globe. Two weeks before this meeting, global leaders, scientists, researchers, and policymakers also gather in New York for the annual UNGA Science Summit to discuss how science and innovation accelerate the achievement of sustainable development goals. Science Summit 2024 was no different, with a focus on solutions that address global challenges, including sustainability, climate action, and health innovation.

Fogarty's Deputy Director Dr. Peter Kilmarx joined a cadre of global health leaders for a plenary session on One Health. One Health is an approach that integrates the efforts of multiple disciplines to improve health for people, animals, and the environment. The session covered a range of topics, including ethical principles of biobanking and secondary use of human biospecimens and data; tackling the youth mental health crisis; financing for development; and enabling policies and regulations for successful implementation of the One Health vision.

Also at the summit, Fogarty Senior Scientist, Rachel Sturke, PhD, moderated a session co-hosted by the European Connected Health Alliance, an organiza-

tion that facilitates knowledge exchange among digital health innovators, and the Society for Women's Health Research, which promotes research on sex differences to optimize women's health. This module emphasized shifting women's health from treatment- to prevention-focused care and explored barriers to this transition.

"We know that socioeconomic factors, cultural norms, and health care infrastructure are deeply intertwined in shaping the success of preventive care," Sturke said. "In implementation science, we recognize that a one-size-fits-all approach is not effective."

DS-I Africa Takes Center Stage

DS-I Africa, an NIH-funded initiative that addresses global challenges through data science, held several sessions at this year's Science Summit. In one, titled, "Genomics for Africa Plenary: Implementing Genomics and Health Security in Africa: A Roadmap for Equity, Opportunities and Partnerships," Laura Povlich, PhD, a Fogarty program officer, discussed the importance of equity in genomics and highlighted the work of the NIH Global Health Research Equity Working Group, which encourages and enables fair research collaboration.

Another DS-I Africa session featured Fogarty Program Officer



Fogarty's Dr. Peter Kilmarx with Dr. Musa Kana of Kaduna State University, Nigeria.

Photo courtesy of Peter Kilmarx

Brad Newsome, PhD. In this session, speakers explored innovative solutions for tracking and adapting to the health impacts of climate change in resource-limited settings. During a discussion among global health funders, Newsome under-scored the importance of partnerships. "When thinking about addressing climate change through the lens of climate and health research, remember that funders like Fogarty and NIH are partners in creating sustainable, practical solutions for tackling climate challenges in the years ahead," he said.

Fogarty's contributions to the UNGA Science Summit 2024 highlighted the center's interest in helping to shape the global health agenda. Fogarty-led discussions on ethical research, preventive health care, and data-driven innovations emphasized the importance of strategic partnerships and collaborative research in addressing global health needs. Alongside other organizations that participated in the summit, Fogarty aims to support sustainable development through science.

"IN IMPLEMENTATION SCIENCE, WE RECOGNIZE THAT A ONE-SIZE-FITS-ALL APPROACH IS NOT EFFECTIVE."

Community



Humanitarian Dikembe Mutombo passes

Dikembe Mutombo, a former Fogarty Advisory Board Member, passed away from brain cancer at the age of 58 this October. The African-born NBA player focused on humanitarian work combatting HIV in Africa, especially in his home country of the Democratic Republic of Congo. He served as an advisory board member from 2003-2006.



Fogarty grantee wins Nobel Prize in Chemistry

David Baker, PhD, director of the Institute for Protein Design at the University of Washington School of Medicine, was awarded the 2024 Nobel Prize in Chemistry for his work on computational protein design. He shares the award with Demis Hassabis and John Jumper of Google DeepMind. Fogarty supported Baker for a 2003 project, “Low-resolution structural genomics of nucleases.”



Nichole Starr receives ACS Humanitarian Award

Nichole Starr, MD, MPH, a trauma and critical care surgeon in San Francisco, has been honored with the American College of Surgeons/Pfizer Resident Surgical Volunteerism Award. A former NIH Fogarty Global Health Equity Scholar, Starr implemented Lifebox’s Clean Cut program, enhancing surgical safety and infection prevention in resource-limited settings. Her expertise has supported Ethiopia’s national trauma care initiatives, and her research extends to Brazil and Liberia.



Adane Kebede selected for James Hakim Award

Dr. Adane Kebede, assistant professor at Ethiopia’s University of Gondar, submitted the highest-ranked abstract to the Consortium of Universities for Global Health (CUGH) annual meeting and so was selected for the 2025 James G. Hakim Global Health Award. Kebede will receive the award, which provides travel support to CUGH meetings, in person at the CUGH 2025 meeting in February.



Ndung’u, Fogarty grantee, elected to NAM

Fogarty Grantee Thumbi Ndung’u, PhD, director of Basic and Translational Science at the Africa Health Research Institute in South Africa, has been elected to the National Academy of Medicine for pioneering the first primary infectious molecular clone of HIV-1 subtype C. Ndung’u, who is a professor at the University of KwaZulu-Natal and University College London, leads the first HIV cure trial in Africa.



Chris Beyrer receives Desmond Tutu Award for HIV research

The International AIDS Society has recognized Duke Global Health Institute Director Chris Beyrer, M.D., with the Desmond Tutu Award for HIV Prevention Research and Human Rights. The award recognizes the efforts of an individual or an organization that has worked to advance both HIV prevention research and the human rights of people affected by HIV.



New mpox variant detected in London

The U.K. Health Security Agency has identified the first cluster outside Africa of illnesses caused by the new, more infectious mpox variant, Clade Ib mpox. Four members of the same London household are being treated in a hospital. The first-infected individual had traveled to countries in Africa that are seeing community spread of the variant. British health officials say the overall risk of infection for the UK population remains low.

TB changes liver metabolism and could promote diabetes

University of Leicester scientists have discovered that tuberculosis (TB), an infectious disease that killed 1.25 million people in 2023, disrupts glucose metabolism in the body. This finding is critical to understanding the interplay between TB and metabolic disease and suggests that undiagnosed TB could be pushing patients towards metabolic disease, such as diabetes. The study, published in *PLoS Pathogens*, adds to the understanding that diabetes worsens the symptoms of TB.

Malaria surges in Ethiopia

Malaria is found in nearly 70% of Ethiopia, with 52% of Ethiopians at risk of infection. Since 2004, with scale-up of control interventions, widespread malaria epidemics have been largely absent in the country of 120 million people located on the Horn of Africa. However, since January 1st of this year, more than 7.3 million malaria cases and 1,157 deaths have been reported, according to WHO. Experts attribute the surge, in part, to mosquitoes' growing resistance to drugs and insecticides.

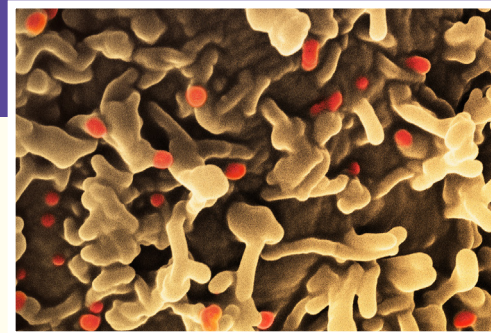
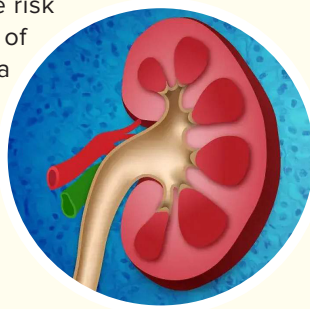
Jordan eliminates leprosy, Brazil eliminates elephantiasis

WHO verified Jordan as the first country in the world to eliminate leprosy, also known as Hansen's disease. Leprosy is a neglected tropical disease (NTD) that mainly affects the skin, peripheral nerves, mucosal surfaces of the upper respiratory tract and the eyes. It still occurs in more than 120 countries. Jordan has not reported any local cases of leprosy for over two decades.

WHO also congratulated Brazil for eliminating lymphatic filariasis, commonly known as elephantiasis, a debilitating parasitic disease spread by mosquitoes that causes pain, severe swelling, serious disability, and social stigmatization. Brazil began a national elimination plan in 1997, which included mass distribution of antiparasitic drugs, and achieved the end of disease transmission in 2017.

Variants linked to kidney disease found in a third of West Africans

A National Human Genome Research Institute study, published in the *New England Journal of Medicine*, revealed that having just one risk variant in the APOL1 gene can increase an individual's risk of developing kidney disease. Over 8,000 people from Ghana and Nigeria participated in the study, which determined that nearly one-third of individuals in these two nations carry APOL1 variants linked to chronic kidney disease. Though most often found in people of West African descent, this variant may also be inherited by people from other regions of the globe.



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FUNDING NEWS

On behalf of the Fogarty International Center at the U.S. National Institutes of Health (NIH), the following funding opportunities, notices and announcements may be of interest to those working in the field of global health research.

Funding Announcement	Deadline	Details
Stigma HIV/AIDS R01 Clinical Trial Optional	December 20, 2024	https://www.fic.nih.gov/Programs/Pages/stigma-hiv-aids.aspx
Japanese Research Fellowships (JSPS) Extramural—Long-term Extramural—Short-term	February 14, 2025	https://www.fic.nih.gov/Programs/Info/Pages/jsp-extramural.aspx
International Research Scientist Development Award (IRSDA) Independent Clinical Trial Not Allowed Independent Clinical Trial Required	March 10, 2025	https://www.fic.nih.gov/Programs/Pages/research-scientists.aspx

International regulations database marks a decade



The ClinRegs online database launched in 2014. One of its newer features is a side-by-side comparison of selected topics for up to four countries.

Launched by the National Institute of Allergy and Infectious Disease (NIAID) in 2014, the ClinRegs website is an online database that provides up-to-date, in-depth information on clinical trial regulatory and ethics requirements for 23 countries spanning North and South America, Africa, Europe, Asia, and Australia. In the past year alone, nearly 68,000 users in 166 countries have visited ClinRegs.

Updated annually, country profiles provide a summary of applicable requirements and links to official regulatory and ethics sources.

English translations are provided when available. Additionally, each profile now includes a tabular dashboard with details on recent regulatory updates, quick facts, current research and websites, and more. Users can also filter country profiles by topic and view up to four countries side-by-side.

To receive the latest ClinRegs information, subscribe to email updates through GovDelivery. If you have any questions or comments, email the ClinRegs team at NIAIDClinRegsSupport@mail.nih.gov.



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