

GLOBAL HEALTH MATTERS

Fogarty International Center

National Institutes of Health

Department of Health and Human Services

Top AIDS trainees salute Fogarty

Some of Fogarty's most notable trainees paid tribute to the Center's AIDS International Training and Research Program during a birthday celebration in Mexico City, held as an affiliated event of the International AIDS Conference.

About 100 Fogarty friends, grantees and trainees gathered at the historic Palacio de la Autonomia to mark AITRP's 20th anniversary and Fogarty's 40th.

Dr. Luis Soto-Ramirez, co-chair of the AIDS conference and a former Fogarty trainee, welcomed the guests, crediting his Fogarty-supported training at Harvard as "the most amazing years" and said the experience "made such a difference in my life."

He also paid homage to AITRP's champion, **Dr. Ken Bridbord**, Fogarty's director of training and research programs.

Dr. Ruth Nduati, internationally recognized for her research involving mother-to-child HIV transmission, remembered her AITRP training at the University of Washington as "a very stimulating and empowering process."

It was exciting to be taught by the people who wrote the textbooks, she said, and to interact with other trainees from around the world who were grappling with the same problems she was.

In addition to conducting groundbreaking research, Nduati (continued on p. 7)



Dr. N. Kumarasamy discusses how AITRP furthered his career during the program's 20th anniversary celebration in Mexico City, part of the international AIDS meeting. Also, from left, **Dr. Danstan Begenda** and **Dr. Alex Opio**, both of Uganda, and **Dr. Jean "Bill" Pape** of Haiti.

Featured Inside

Scholars train for foreign research	2-3
"Virtual hospital" kit developed	4
International AIDS studies	6-7
China seeks world status in health	10
Earlier measles vaccination sought	13
Global health briefs	14
PEOPLE	15
FUNDING OPPORTUNITIES	16

Information technology, please?

From tracking outbreaks of new infectious diseases with the potential to spread at jet speed to reminding HIV-infected patients to take their medications, information and communications technology (ICT) has become an indispensable part of global health.

Different Fogarty program areas are finding new ways of using communications hardware and software to enhance research projects in hard-to-reach regions, and the Center is examining success stories in order to make ICT an integral part of its new strategic plan to foster a sustainable research environment in low- and middle-income countries.

At an "e-health" conference sponsored by the Rockefeller Foundation in July, Fogarty Director **Dr. Roger I. Glass** said most of the new money in global health is disease-specific but each of those programs needs interoperable databases to become fully effective.

"If I go to any part of Africa, I can use my bank credit card in any bank or ATM. I can buy a Coca-Cola in any little city. But I can't get a health record or immunization card," he said in urging ICT programs seek corporate partners. "I think the private sector has a lot to teach us about logistics, about Internet broadband access and they are in a position that they could well want to fuel what we're doing."

ICT is a broad concept that encompasses computers, cell phones, broadband, video-conferencing and distance learning—and Fogarty grantees are at the forefront of the movement, trying to adapt fairly standard Western technologies to low-resource settings.

"The use of cell phones and Internet applications for health research and surveillance is one of the most exciting tools in public health on the horizon," says **Dr. Pamela Johnson** of Voxiva, a (continued on p. 4)

FOGARTY AT FORTY



The Center celebrates an anniversary with a tribute to the man whose vision gave it life.

Pages 8-9

12 days of summer training –

“This place is amazing ... *everything* is amazing,” said Zambian **Dr. David Linyama**, reflecting on his first four days at the NIH campus and his first visit to the United States.



Three visiting International Clinical Research Scholars get their bearings as they start a two-week orientation.

Linyama, one of 96 American and foreign pre- and post-doctoral global health scholars selected for 12 days of intense training on campus and 10 months of research and training abroad, said he was overwhelmed by how smoothly traffic and the subway system ran.

When that produced an “are-you-kidding?” look from a veteran of Rockville Pike traffic, Linyama chuckled, “Spend a few hours in Africa.”

The Mozambique-born general surgeon will have more difficult challenges than mere traffic jams back in Lusaka, where, under sponsorship of the Fogarty International Clinical Research Scholars and Fellows program, he and American medical students will be trying to introduce and promote neonatal circumcision as an AIDS preventative.

Under the program, U.S. postgraduates—mostly third-year medical, dental or veterinary students—are paired with foreign counterparts to conduct clinical research together abroad under the tutelage of NIH-funded universities or other research institutions.

Similarly, post-doctoral trainees are paired but they are expected to develop their own research projects. After two weeks on campus, the 96 trainees from 23 states and 20 foreign countries were dispatched to 25 sites.

It is a blend of the personal—wanderlust, bravado, the romance of medicine—or the imperative to put one’s brains and technical skills to use where they will do most good that brought such a diverse collection of talent here, by far the largest class of the six-year-old program.

“I grew up moving around the world and was always interested in global things,” said Marjory Bravard, a Tufts University medical student, whose next stop is Lima, Peru.

For **Brock Daniels**, a high school athlete and poet and now a Northwestern medical student, “the travel (interest) came first; medicine came later ... You see the world differently, and once you see the world differently you have no choice but to help where you can.”

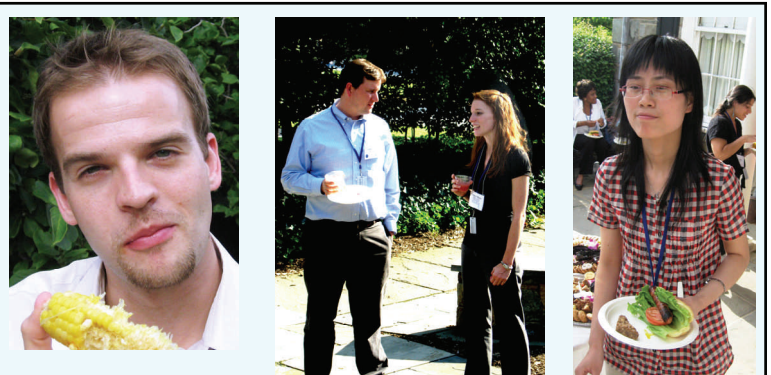
He hopes the Fogarty experience will launch his career because “it gives you street cred in international health.”

Although chronic diseases are now emerging as a global health threat, the scourge of infectious diseases remains the magnet for most of the idealistic young medical students from America.

For the foreign students, Fogarty offers a chance to help them help their own people and, ideally, to make careers in their home countries.

Jing Li, from a small town in the economically lagging Anhui province of China, is pursuing a Ph.D. in epidemiology and is headed to Nanjing, where she will focus on educating people about syphilis.

(continued on p. 3)



At the Stone House, scholars and fellows mingled at a barbecue. From left: Karl Bezak, Scott Peterson with Vanderbilt University program coordinator Tiffany Patterson, and Jing Li, with her first hot dog ever.

— for a lifetime of service

Those far away places

The 96 members of the Fogarty International Clinical Research Scholars and Fellows Class of 2008-2009, the largest ever, are working through next spring at 25 sites in 18 countries.

Their projects will be conducted in Argentina, Bangladesh, Bolivia, Botswana, Brazil, China, Haiti, India, Kenya, Peru, Mali, Nigeria, Rwanda, South Africa, Tanzania, Thailand, Uganda and Zambia.

The class includes dental and veterinary students and bachelor's or master's degree holders in anthropology, economics, biology, biophysics, chemistry, ethics, mathematics, physiology and nursing, as well as post-doctorates in epidemiology, neurology, dermatology and surgery.

The program, supported by Fogarty and 12 other components of the National Institutes of Health, is administered by Vanderbilt University's Institute for Global Health and the Association of American Medical Colleges.

"These opportunities provide new insights for tomorrow's clinical leaders, both in the United States and in low- and middle-income nations," says Dr. Sten Vermund, the principal investigator of the Scholars Support Center.

For a list of scholars, their backgrounds and destinations go to http://www.fic.nih.gov/news/press_releases/2008/clinicalscholars_vanderbilt.htm

(continued from p. 2)



Dr. Stephane Morriseau, a community health graduate of St. Louis University, had been head of dental services at Haiti's primary care clinics for those infected with HIV. His research will be on the link between AIDS and pediatric dental problems caused by certain medications or compromised immunity.

Dr. Cesar Bocangel wants to combine his medical and business degrees to help advance living conditions in his native Peru, where he will be training to do further research into Chagas disease.

Latin America has one of the higher Caesarean section rates in the world, and **Dr. Agustina Mazzoni**, an ObGyn from Argentina, and **Nancy Liu**, a clinical psychology Ph.D. student from the University of Nebraska, want to learn how Argentine women decide whether to have a C-section.



Fogarty Scholars prepare to present to the entire "class" at the end of orientation. From the left: **Deepthi Kattula** of India, **Sumeet Singh Mitter** from UCLA, **Cecilia Mbae** of Kenya, **Rebecca Mitchell** from Cornell, **Obinna Nnedu** from the University of Washington and **Agustina Mazzoni** of Argentina.

Dr. Aissata Ongoiba, a physician from Mali, is now training at Bamako University to further her previous work on defeating malaria. The difficulty, she says, is, "Some people don't like using nets. They say, 'They make me hot,' and they don't see the connection between mosquitoes and malaria."



What did these already accomplished doctors, scientists, students and Samaritans get out of the program?

"It felt a bit like I was being inaugurated into a great movement and an elite culture of people," said **Jenifer Compton**, a medical student at Oregon Health and Science University.

Tanzanian physician and scientist **Dr. Marina Njelekela**, said "the sessions were very educational, interesting and very practical and in line with health problems in low- to middle-income countries."



University of Utah nursing doctoral student, **Sarah Iribarren**, exulted: "I was most astounded by the caliber of speakers, all leaders or heads of departments in their area of expertise, and more so by their graciousness, approachability and earnest interest in sharing their knowledge with enthusiasm."

“Long distance information, get me Memphis, Tennessee

(continued from p. 1)

a global health telecom company that works with some grantees.

In addition, Johnson says, the cell phone has been used for program management patient monitoring and personal health.

Attach a camera that turns a cell phone practically into a microscope, and “The public health implications of this (for example in diagnosing malaria or tuberculosis remotely) are stupendous,” say Dr. Krishnan Ganapathy and Aditi Ravindra in a Bellagio conference paper.

The promise of ICT overall, says **Dr. William Tierney** of Indiana University is that “we have critical tools for maximizing the benefits provided by the limited financial and human resources available.”

From a small Fogarty grant, Tierney

created the first electronic medical record system in Kenya, and he was instrumental in developing similar systems based on low-cost, open-source tools now in use in more than a dozen countries on three continents.

After visiting a Fogarty program in Haiti, **Dr. Rebecca Dillingham** of the University of Virginia Center for Global Health and a former grantee herself, replicated the idea of using cell phones to communicate with HIV-infected people in rural parts of her state.

Under her pilot project, free phones are given to patients to remind them through text messages to take their medicines, refill their prescriptions and remember their next clinic appointment.

And although not all her patients have used or even seen a cell phone, focus groups of likely users made it clear “everybody wants one,” she says.

In Peru, grantee **Dr. Walter Curioso** has built an interactive computer system using cell phones not only to promote adherence to antiretroviral treatment and encourage risk-reduction but for real-time collection and transmission of adverse events involving use of metronidazole as a possible treatment for vaginosis.

“Cell phones are ideal tools for a mobile team, and the equipment is less likely to be stolen compared with laptops or personal digital assistants,” he says.

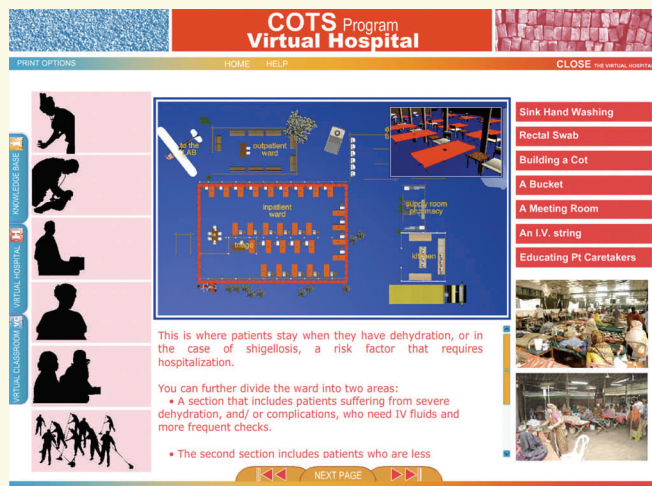
Echoing Dillingham’s observation that “everybody wants one,” the fastest growth in cell phone use has come in Africa, where, by the end of this year, Voxiva’s Johnson says, there will be more of them than in North America.

According to the company there are now 3.5 billion cell phones in the world, and by 2010, 90 percent of the world will have coverage.

Former trainee makes “virtual hospital” kit for cholera

One example of what the Fogarty International Clinical Research Scholars program can do lies inside a compact disc packet in the hands of **Dr. Eric J. Nelson**, an alumnus from the second class of scholars sent abroad three years ago.

Fogarty offices to show off his sideline—a multimedia “e-book” developed with friends for use by clinicians and other health workers to quickly diagnose and treat outbreaks of potentially deadly cholera and shigellosis.



Courtesy: ICDDR,B

Nelson, who just got his Ph.D. in molecular biology from Tufts, took time off from medical school in 2005 to accept a place in the program, which sent him to Bangladesh—a beacon to the rest of world for fighting cholera.

Now, returning to complete medical school, Nelson visited

The CD contains a knowledge base, easy-to-follow instructions on how to set up an emergency hospital—a MASH for infectious disease disasters—and emphasizes practical, if not textbook, case studies to train those treating a large number of patients.

It is packaged as a CD with a slide show of graphics, narration and music along with a supply of foldout pocket cards for doctors, nurses and volunteers.



Dr. Eric J. Nelson with his CD kit.

Nelson is one of six authors of the “virtual hospital” kit and worked largely *pro bono* on behalf of the Cholera Outbreak Training and Shigellosis Program (COTS), funded by USAID, the International Centre for Diarrheal Disease Research, Bangladesh and the Swiss Tropical Institute.

“In an outbreak, the western style of care does not cope well,” Nelson said. “With COTS, a medical staff will be able to train their team and get to work on stopping devastating diseases that should be limited to the history books.”

(For more information: ericjnelson@tufts.edu)

. . . or maybe teleconference me to Port-au-Prince, Haiti”

Forty years ago, the idea of teaching a college course by television was a necessary evil at overcrowded American college campuses.

Today, with leading universities freely making their courses available on the Internet and, with teleconferencing technology relatively cheap, “distance learning” is being used to save lives in low-income, high-illness countries.

After a consultation with leading experts in the field this summer, Fogarty is taking steps to incorporate technology into its programs to help grantees connect students, clinicians and patients with both general information and research data via the Internet itself, the noncommercial academic-based Internet2, the OpenCourseWare movement and devices called “Internet in a Box”™ and “Virtual Hospital” (see p. 4). Even Second Life® is being looked at as a teaching tool.

Although distance learning has been a staple of many universities’ academic and public outreach for years, the Center’s focus is on using it to train researchers how to build sustainable health infrastructure in their countries.

“The countries with the greatest need for health resources are the same countries with the fewest Internet resources,” says **Dr. Thomas Cook**, a professor and environmental health grantee at the University of Iowa.

Cook helped develop an offline method of transferring medical information called the “E-Granary Digital Library,” which stores more than 700 CDs-worth of educational resources from 1,000 Web sites and is shipped to institutions in Africa, India, Bangladesh, Azerbaijan and Haiti for installation on their computers and local networks without need for an Internet connection. (www.egranary.org)

“Good teaching may overcome a poor choice of technology, but technology will never save bad teaching.” — Consultant Dr. Tony Bates.

They can even send back local content for inclusion on the next iteration of the CDs. The cost is \$750 for the 750-gigabyte digital library and \$2,800 for a server.

Cook also is an advocate of Web conference software, such as Elluminate, which can be cost-effective in regions where classrooms or faculty are few and far between. Elluminate is available to all Fogarty grantees for use on their projects by contacting robin-ungar@uiowa.edu.

A Tufts University program under Framework grantee **Dr. Jeffrey Griffiths** collaborates in curriculum development with Makerere University and the University of Dar es Salaam and relies heavily on a digital library that can link

to computers in resource-poor areas.

The program seeks culturally appropriate responses to health problems; one example being the realization that a Ugandan sanitation solution dependent on school children taking turns cleaning new toilets would not work in Indian schools because of caste-related prohibitions on such a chore.

“If I go to any part of Africa, I can use my bank credit card in any bank or ATM. I can buy a Coca-Cola in any little city. But I can’t get a health record or immunization card. I think the private sector has a lot to teach us.” – Dr. Roger I. Glass.

A Harvard program under Fogarty grantee **Dr. Richard Mollica** focused on natural-disaster-induced mental health trauma brings students together for two weeks in Italy followed by five months of Web-based training with close faculty supervision and strong peer learning.

Requirements include each student participating in two small-group assignments—a clinical or policy case detailing a current work problem and a video.

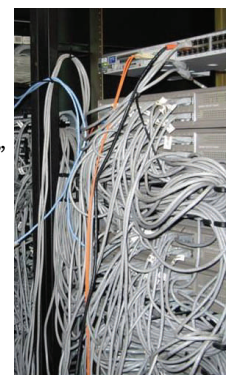
Mollica says that preliminary results reveal that this model has resulted in an increase in networking and decrease in isolation, confidence and competence in technical knowledge, an empathetic climate and trusting community for learning and high levels of both student and faculty satisfaction with certificate training.

Some coursework can be taken by “self-learners” using packaged material, says Fogarty informatics program officer **Dr. Flora Katz**, but other courses that require laboratory or field training are best conveyed person-to-person.

“The hands-on part of science cannot be self-taught, and we don’t know yet where the edge is for distance learning,” she says.

ICT and distance learning have the potential to transform health systems, says **Dr. Ariel Pablos-Mendez**, managing director of the Rockefeller Foundation, but there are still huge disconnects: computer interoperability and the relatively low financial investments ICT and health companies are making in each other.

He says bringing the talent of information technology professionals and corporations to serve public health needs in the developing world should be “the higher order vision. . . I think this is going to happen, and I think it is going to be an incredible revolution for the next 10 years.”





Longer course of HIV drug may help nursing babies

Babies born to HIV-infected mothers in low-resource countries and who were treated with nevirapine for six weeks had significantly less chance of infection than infants receiving the standard single dose, suggests new research conducted in part with Fogarty support.

But some experts, including three who were listed among the co-authors, said the data were not strong enough to be used as the basis of policy making.

In trials of more than 2,000 infants in Ethiopia, Uganda and India, a team of 275 scientists conducted randomized clinical trials to determine the effect of repeated low-dosing of the drug.

“The extended-dose regimen significantly reduced the risk of overall infant death at both six weeks and six months of age, compared with the single-dose regimen,” the study concluded, noting it is unclear what the optimal length of treatment is. After six weeks, there were 42 percent fewer infant HIV infections or death, and 27 percent fewer after six months.

The study, known as SWEN (Six Week Extended-Dose Nevirapine Study), involved many Fogarty alumni, and results were published in *The Lancet* to coincide with the 17th Annual International AIDS Conference.

Commentaries on the findings suggested that another

recent study, in the *New England Journal of Medicine*, may be more useful, however.

It found among infants in Malawi that a longer course of nevirapine—or use of the drug in combination with ziduvodine for 14 weeks, instead of the 8 weeks of nevirapine alone in the SWEN study, had a significant and longer protective effect of up to 9 months.

An accompanying commentary in the *Lancet* said the Malawi trial “produced a more definitive result” and that the SWEN study should be considered as supporting evidence for the safety and effectiveness of nevirapine.

They said, “Extended infant prophylaxis with nevirapine is simple enough to be implemented almost anywhere. It represents a long-awaited, if partial, solution to a mother's impossible choice. We should not delay.”

“*Extended-dose nevirapine to 6 weeks of age for infants to prevent HIV transmission via breastfeeding in Ethiopia, India, and Uganda: an analysis of three randomised controlled trials.*” Six Week Extended-Dose Nevirapine (SWEN) Study Team, *The Lancet*. Vol. 372, Issue 9635, 26.

“*Extended Antiretroviral Prophylaxis to Reduce Breast-Milk HIV-1 Transmission.*” Newton I. Kumwenda, Donald R. Hoover, Lynne M. Mofenson, et. al. *New England Journal of Medicine*. Volume 359:119-129.

Border “sub-epidemic” could spread, expert warns

A “dynamic HIV sub-epidemic” at the U.S. border, possibly caused by co-existence of a flourishing drug and sex trade, could be lead to a resurgence throughout Mexico and Central America, a prominent AIDS researcher predicts.

Dr. Steffanie Strathdee, a Fogarty Framework grantee from the University of San Diego, coauthored a commentary with Dr. Carlos Magis-Rodriguez in the *Journal of the American Medical Association*, citing high rates of sexually transmitted infections among injection drug users and female sex workers.

The paper was released at the International AIDS Conference in Mexico City, the first held in Latin America. It calls for “shared responsibility” for recognizing and

treating sexually transmitted diseases between all bordering countries everywhere.

Efforts to integrate diagnosis and treatment are needed on both sides of the border they said, warning, “Unless HIV prevention is scaled up immediately, Tijuana's HIV epidemic could become increasingly generalized.”

Because most of the methamphetamines and much of heroin destined for the United States moves through Tijuana, and because of easy passage of people, prostitutes and infection, the authors wrote:

“In Mexico, a dynamic HIV sub-epidemic on its northern border with the United States now threatens its designation as a country of low prevalence and high risk.”

They said the increased HIV prevalence and high mobility in both directions across the border “may represent what lies ahead for Mexico and possibly Central America.”

Strathdee and Magis-Rodriguez also suggest because two-thirds of Tijuana's migrate from other regions, those who acquire HIV may be spreading it when they return home.

They say because of the stigma attached to homosexuality, many gay and bisexual women are also having sex with women, which “may be contributing to a feminization of Mexico's HIV epidemic.”

“*Mexico's Evolving HIV Epidemic.*” Steffanie A. Strathdee, Carlos Magis-Rodriguez. *JAMA*. 2008;300(5):571-573.



Merson: Prevention efforts “woefully insufficient”

Although UNAIDS is reporting major gains in prevention of new HIV infections in several countries most affected by the epidemic, two Fogarty grantees are warning that “global prevention efforts remain woefully insufficient” and calling for “radical behavior changes.”

In *The Lancet* articles released in connection with the 17th annual International AIDS Conference, grantees **Dr. Thomas Coates** and **Dr. Michael Merson** emphasized that prevention

strategies must be reinvigorated.

Estimating that half the world’s projected 7-to-16-million infections could be prevented by 2015, Merson said global prevention efforts “remain woefully insufficient, as reflected by the fact that key prevention services currently reach less than 10 percent of individuals at risk worldwide.”

Calling for “combination prevention,” Coates said it is “neither simple nor simplistic. We must achieve radical

behavioral changes—both between individuals and across large groups of at-risk people—to reduce incidence.”

The UNAIDS report credited increased condom use among young people who have multiple sex partner and a delay in first-time sexual intercourse as two examples of behavior change examined in Burkina Faso, Cameroon, Ethiopia, Ghana and Malawi, Uganda and Zambia.

(<http://tinyurl.com/6f3ka4>)

Star alumni celebrate AIDS training program

(continued from p. 1)

holds a leadership position in an African AIDS researchers’ network, is principal investigator on a PEPFAR grant, teaches at the University of Nairobi and does clinical work at Kenyatta National Hospital.



Center Director Dr. Roger I. Glass welcomes Dr. Ruth Nduati of Kenya.

For **Dr. Alex Opio**, a senior official in Uganda’s Ministry of Health, AITRP provided access to training that has been “extremely useful” to his career, he said. Opio—who received his Ph.D. from Case Western with AITRP support—played a key role in managing Uganda’s ebola outbreaks in 2001 and 2007, he said. “The training I received through Fogarty equipped me with the knowledge and skills I needed for my work.”

Opio also directs his country’s programs to control STD/AIDS, malaria, TB and leprosy and has developed a number of national policies and strategies for preventing and controlling communicable diseases including HIV/AIDS.

Numerous other Fogarty

“I feel honored that through my Fogarty training, to have the privilege as an African physician, as someone who was born in a hut with mud walls, to come from that and to participate in a forum like this—I am truly grateful,” she said.

alumni have also risen to positions as global leaders in the fight against AIDS, said **Dr. Roger I. Glass**, the Center’s director.

The program—designed to build research capacity in low- and middle-income countries—became the model for a dozen or so Fogarty programs that followed. Its philosophy of flexibility, sensitivity to local needs, long-term investment and encouragement of full partnerships between U.S. and foreign scientists is central to its success, Glass said.

While acknowledging accomplishments of AITRP trainees in areas such as HIV screening, mother-to-child transmission and couples counseling, he urged the audience to move forward on prevention and implementation research. “We have the tools but we really lack the knowledge to implement these well,” he said.

From the nearly 50 speaker nominations submitted by AITRP program directors, 16 celebrated trainees were selected by the planning committee—including **Dr. Warren Johnson** of Weill Cornell Medical College, **Dr. Carlos del Rio** of Emory University and **Dr. Myron Cohen** of the University of North Carolina—which organized the session and reception that followed. For a list of the honored trainees:

<http://tinyurl.com/59pdqx>



(From left) Fogarty’s **Millie Hatton** and **Dr. Jeanne McDermott**, who manage AITRP, help celebrate the 20th anniversary of the program with **Dr. Jean Carr** of the University of Maryland and Fogarty’s Deputy Director **Dr. Michael Johnson**.

As master of ceremonies, **Dr. Jean “Bill” Pape**, Haiti’s leading HIV/AIDS expert and a senior AITRP collaborator, concluded, “There is no better example than Fogarty to show one single world united fighting the HIV disease.”

Fogarty turns forty ...

In his 20 years as chairman of the House subcommittee that funded what is now HHS, **Rep. John E. Fogarty** (D-R.I.) had a vision to create a more peaceful world by sharing biomedical research discoveries with other nations. But he died at his desk before the dream of a “Health for Peace” institute could be realized.

His legacy turned out to be the Fogarty International Center, which celebrated its 40th anniversary in July with an open house for NIH staff at the historic Stone House.

Back in Fogarty’s heyday, Congress was much less partisan than today, and he won the admiration and cooperation of many Republicans concerned with health issues.

The power of appropriators was so great and Fogarty’s likeability so wide that he single-handedly raised the NIH budget from \$37 million to \$1.24 billion during his chairmanship.

That he was such an ardent health research advocate might not be expected from his background. Born in Providence, R.I., March 23, 1913, Fogarty finished high school and, like his father, became a bricklayer. Within 10 years he was president of the statewide union.

Elected to Congress in 1940 at the age of 27, he won appointment seven years later to the House Appropriations Committee and its subcommittee that controlled spending for the NIH and other agencies in the old Department of Health, Education and Welfare.

Two years later he became the subcommittee’s youngest chairman and devoted himself to the task of dismantling the brick wall of congressional resistance to spending on health research.

Unusual for that day, he would badger friendly witnesses from the NIH at budget time about why they were not asking for more money.

The answer was that they were dutifully defending the request of the president, their ultimate boss.

The result? A lot of money. Usually a lot more than the president had requested.

In addition to promoting research throughout his congressional career, Fogarty consistently urged funding for the disabled and those with mental and physical impairments, as well as for medical libraries.

By 1963, he was dreaming of “a great international center for research ... dedicated to international cooperation.”

He died Jan. 10, 1967, while preparing to re-introduce such legislation, and 18 months later President Johnson created the John E. Fogarty International Center in his memory.

Courtesy: Fogarty family



Congressman John E. Fogarty was in the forefront of the New Frontier and the Great Society of Presidents Kennedy and Johnson. He died while preparing legislation to fund

From a starting budget of \$500,000 that has grown to \$67 million, the Fogarty Center today supports more than 5,000 researchers in more than 100 countries.

After his death, the *New York Times* editorialized: “No one in the history of this country has done more to promote more and better health services, more and better health facilities and more and better health research than Representative Fogarty.”

“I should like to see ... at Bethesda a great international center for research in biology and medicine dedicated to international cooperation and collaboration in the interests of the health of mankind ...”

— Rep. John Edward Fogarty, 1963



faces new challenges

Biomedical research has always been an inherently international enterprise, says Fogarty International Center Director **Dr. Roger I. Glass**.

“In this era of globalization, the trend will not only continue, but will likely become stronger,” he says.

“It will also require a well-trained cadre of U.S. health scientists who are able to work seamlessly in diverse settings. If we are to continue to lead in biomedical research, then U.S. researchers must be encouraged to effectively participate in international science.”

Some Fogarty initiatives already are making inroads.

For example, to ensure the sustainability of programs such as the President's Emergency Plan for AIDS Relief and the Global Fund to Fight HIV/AIDS, TB and Malaria, countries will need scientists with the research skills necessary to overcome implementation barriers as prevention, care and treatment programs are developed.

To help satisfy that need, Fogarty's International Clinical, Operational, Health Services Training Awards for AIDS and TB have begun strengthening the skills of scientists in low- and middle-income countries to do research on implementing promising interventions at

population and health care system levels.

Rep. John E. Fogarty, for whom the Center was named, was prescient in arguing the needs and rewards of global health research 50 years ago. Today, the Center is extending his vision in a world made smaller and more interdependent by international trade, travel and the Internet.

The Center has set an ambitious course for the future, addressing emerging areas of science and shifting disease burdens, and helping to build the global health research workforce in the United States and around the world.

“We envision a world in which numerous centers of research excellence in the developing world will support a skilled scientific workforce that understands how to improve health outcomes and systems through rigorous research,” says Glass. These centers will be linked with one another through emerging information and communications technologies.

“Working toward this vision moves us closer to the ideal of global health, one that reflects the aspiration of every human being on the planet to live a long and healthy life.”

Tomorrow



Amy Porter, executive director of the Foundation for NIH, and Fogarty Director **Dr. Roger I. Glass**, do the birthday cake honors.



The door was wide open at Stone House as members of the NIH campus and others helped the Fogarty Center celebrate its 40th anniversary.

China strives to be world leader in science, expert says

China is striving to become a leading global scientific power, but it may not happen immediately, says **Dr. Lincoln Chen**, president of the China Medical Board, a nonprofit organization that promotes health education and research in the medical universities of the world's most populous country.

Chen reminded a group of scientists and policy experts from various institutes and centers at a Fogarty forum that China is rapidly producing and advancing its export of knowledge.



Dr. Lincoln Chen, president of the nonprofit China Medical Board, says China is striving to be a leader in global health.

Although the country has one-quarter of the world's doctors, they are not all well trained and the faculty and universities remain handicapped by the stifling of thought during the Cultural Revolution of the 1960s and 1970s, he said.

However, the country is increasingly active in global health, including providing assistance in Southeast Asia and Africa and has an advanced computer-based online modern infectious disease surveillance system, he said,

noting that China "will follow the rules of the game on the international circuit."

When John D. Rockefeller created the China Medical Board in 1914, Chen said, "China was the Africa of today," considered "backward, miserable and ignorant."

However, "This is a great scientific civilization," Chen said, pointing to China's many scientific achievements, including development of artemisinin as an anti-malarial.

Despite setbacks to science during the Cultural

Revolution, China is "an important global player," and as a major global exporter of all sorts of manufactured products, the country also exports health risks, Chen said.

He cited the sheer size of its population living in proximity to vastly increased numbers of domesticated animals, which has potential for infectious disease emergence.

He predicted that the Olympics will have transformed America's thinking and understanding of China.

"It will generate both enormous admiration, but also concerns. China is not what it was 25 years ago in our mental imagery, but in terms of global health, China is very important."



Chen noted three significant issues raised by China's re-emergence in global health:

- Because of scientific talent, the availability of subjects and low cost of operations, China is hosting increasing numbers of clinical trials, which Chen said will raise inevitable questions about ethics and validity.
- While science itself is rapidly expanding, the culture of science is still evolving. China has established independent peer and ethical review systems, and Chinese journals are numerous.
- Chinese scientists are attractive recruits for drug companies because of the dearth of science Ph.Ds in the West, the availability of Chinese scientists and lower cost of training and research operations in China.

"China is now striving to be a top scientific power in the world," Chen said, adding, "It's not going to be that, very shortly. I think the culture of science in China needs to be rebuilt from past turmoil."

Nevertheless, he said, "The universities are producing and the government is investing large amounts to be at the frontier of cutting-edge science."

Fogarty awarded special funds

More than \$2.2 million of a congressional appropriation will go to the Fogarty Center to support influenza research and training by Fogarty scientists and its grantees and collaborators.

The money was awarded in late spring by the Office of the Secretary

of HHS from a pool of about \$35 million Congress designated for international pandemic flu activities.

Fogarty made the case with HHS that the Center's two decades of linking top U.S. scientists with those in more than 100 countries have built a research network of thousands who

are ready to share information that could lead to more effective avian and pandemic flu control measures.

Overall, Fogarty's research activities are based on a systems approach to global health that integrates molecular evolution with the population dynamics that regulate

Study says to base flu policy on life-years saved

Vaccine should be given in a flu pandemic to the age groups with the most potential years of life at risk, according to a team of Fogarty scientists writing in the August 1 issue of the *Journal of Infectious Diseases*.

This conclusion stems from considerations about the age groups experiencing the highest mortality risk in past flu pandemics and considerations about vaccine efficacy and life expectancy, both of which decline with age.

In the article, “Prioritization of Influenza Pandemic Vaccination to Minimize Years of Life Lost,” **Dr. Mark Miller**, director of the Division of International Epidemiology and Population Studies, and Fogarty scientists **Dr. Cécile Viboud**, **Dr. Rebecca Grais** and **Maia Rabaa** applied a “years of life lost” (YLL) metric—not just overall mortality—to U.S. mortality statistics collected during the influenza pandemics of 1918, 1957 and 1968.



In the event of another pandemic, vaccine is likely to be in short supply in the United States, they say, making allocation decisions critical.

The direct benefits of vaccination, and age patterns of mortality risk in pandemics, all shift attention away from seniors and toward either younger adults or children as the optimal target to mitigate mortality, the article says.

“The question of who should be vaccinated first needs to be debated and reasoned through now, before the onset of a public health emergency, while we have the time to reflect on which decision-making metric is the most appropriate,” the authors conclude.

They said their study is not a policy prescription itself, but “highlights how the choice of health outcome metrics

such as YLL can influence the prioritization of age groups to vaccinate in pandemic settings.”

Calling theirs “a conservative metric that captures the major health burden of pandemic influenza with no need to set arbitrary values on quality of life,” the authors say they are the first to quantify the benefits of vaccination by using years of life potentially saved in a future pandemic.

The ethical question raised in setting priorities is whether one life has more or less value than another.

“We do not make judgments about the values of people’s lives, but it is important to debate such ethical and medical considerations now, and to propose rational vaccine strategies based on science, rather than making hasty decisions in the middle of an on-going pandemic crisis,” said Viboud.

Data indicate that in a 1918-like scenario, the most years of life that could be saved by targeted vaccination would be among those under age 45; in a 1968-like scenario, those between 45 and 64; and in a 1957 scenario, people over 45.

The government’s pandemic preparedness draft plan, revised in July, places priority on key government officials, health care workers and emergency responders, followed by children in severe and moderate flu scenarios, while seniors are given priority over children in a mild scenario.

Prioritization of Influenza Pandemic Vaccination to Minimize Years of Life Lost. Mark A. Miller, Cecile Viboud, Donald R. Olson, Rebecca F. Grais, Maia A. Rabaa and Lone Simonsen. *Journal of Infectious Disease*, 2008; 198:305-311.

by HHS to analyze global flu data

transmission and the potential for a pandemic.

The funding will go to programs to:

- Expand existing data-sharing and collaborative research activities to a wider geographic area of the world, especially the tropics, to gain a better

understanding of both avian and human influenza virus evolution at a global scale.

- Expand epidemiological research and planning in countries vulnerable to bird flu and build long-term relationships between U.S. and foreign scientists in both government and academia.

- Conduct workshops in Europe and either Africa or South Asia where scientists from dozens of countries can collaborate.
- Try to close the gap between and among global surveillance efforts and to build analytical and predictive tools.

Burden of Chagas disease still high after a century

Closer links between Chagas disease research and public health practices are necessary, say two Fogarty grantees and a colleague, commenting on the 100th anniversary of the infection's discovery.

The essay in the *International Journal of Epidemiology* noting the 100th anniversary of the discovery of Chagas disease in Brazil also calls for tighter links between research and public health practices.



Photo: University of São Paulo.

The blood-sucking *Panstrongylus megistus* spreads Chagas disease.

The researchers **Dr. Ricardo Gürtler** and **Dr. Uriel Kitron**, along with co-author Liléia Diotaiuti also note the relationship between political conditions and efforts to re-establish effective control of the disease.

It was identified in 1909 by Brazilian doctor Carlos Ribeiro Justiniano das

Chagas, remains primarily a disease confined to South and Central America and is spread by blood-sucking bugs known as *Panstrongylus megistus*, which hide in thatched roofs, walls and bedding of poorly constructed houses.

After cycles of success and failure to control Chagas—the

authors call it “a poverty-related and poverty-promoting disease”—the burden of disease in Latin America is up to 2.7 times that of malaria, schistosomiasis, leishmaniasis and leprosy combined.

The commentary notes that existing insecticides, diagnostics and drugs are “grossly misused or applied in suboptimal ways ... within the frame of less effective or misguided strategies.” In addition, “Recurrent instability at political, social and economic levels pose major threats to disease control and elimination programs in the regions most affected by Chagas disease.”

Beyond better public health management, the authors conclude that broad social participation and school-based health promotion are essential for sustained Chagas disease management.

To achieve long-term sustainability of disease management programs, they suggest, the tight links between research and disease control exemplified by the discovery of Chagas disease must be re-established and strengthened to eradicate it.

Chagas disease: 100 years since discovery and lessons for the future. Ricardo E Gürtler, Liléia Diotaiuti and Uriel Kitron. *International Journal of Epidemiology*. 2008 37

Evidence key to advocacy

The basis of any advocacy for global and other health programs is building evidence and showing return on investments, Global Health Council governmental relations director **Dr.**

Nicole K. Bates, told NIH staff recently.

Invited by Fogarty to speak with international representatives from all institutes and centers, Bates said it is possible to advocate for more support “without breaking protocols and getting yourself and agency in trouble.”

Successful advocacy, she said, starts with an evidence base, which leads to advocacy, which leads to policy formulation and finally implementation. Demonstrating return on investment, “the need to show what interventions can do and what policy can do” is critical to sustaining support, she said.

Bates suggested that networks of researchers, implementers and advocates talk more with one another, even if informally, and that scientists provide information to policymakers, “lending your credible voices.”



Implementation proposals sought

Proposals are being accepted through Sept. 26 for the 2nd Annual NIH Conference on “The Science of Dissemination and Implementation: Building Research Capacity to Bridge the Gap from Science to Service.”

The goal of the conference is for the research community to exchange ideas, explore contemporary topics and identify concepts, methods and strategies to build research and organizational capacity for dissemination and implementation science.

Applicants are encouraged to submit proposals and abstracts for oral presentations/panels and posters.

For details, including the range of research topics, descriptions of each type of session and instructions for proposal submission, go to <http://grants.nih.gov/grants/guide/pa-files/PAR-07-086.html>

Correction

The May-June issue of *Global Health Matters* erroneously pictured and identified the mosquito species that spreads malaria as *aedes aegypti*.

Malaria is transmitted by certain species of the *anopheles* genus, pictured here.



Experts back earlier vaccinations for measles

Fogarty scientists published an editorial in *BMJ (British Medical Journal)* in late July generally supporting findings of a Danish research team calling for measles vaccinations for children in low- and middle-income countries to start at 4.5 months of age instead of the global norm of 9-15 months.

In the editorial, Center scientist **Dr. Hélène Broutin-de-Magny** and **Dr. Mark Miller**, director of Fogarty's Division of International Epidemiology and Population Studies, said the study should be an impetus for policy makers to consider new anti-measles strategies if further research validates the findings.

The original study by Dr. Peter Aaby of the Danish Epidemiology Science Centre and colleagues was based on randomized clinical trials of 1,333 infants in Guinea-Bissau.

They found that the earlier vaccination provided more than 90 percent

protection against infection and 100 percent protection against hospitalization for measles.

The study also found a nearly four-and-a-half times reduction in monthly measles incidence among those who were vaccinated at the earlier age.

Normally, a mother's natural immunity protects an infant against measles starting at about 9 months, but as more mothers have been vaccinated themselves, few of the natural measles antibodies are transferred to the child.

"As the authors did not control for vaccination or HIV status of the mothers ... results are context-specific and warrant further exploration in various settings," Broutin-de-Magny and Miller editorialized.

"Nevertheless, the study is relevant and timely, since it offers policy makers potential alternative vaccination

strategies to explore with further research," they said.

Broutin-de-Magny and Miller concluded that the goal of high vaccine coverage should not come at the expense of more timely vaccination and that earlier vaccination should not substitute for other infant doses given between 9 and 15 months.

They also suggested that future research should focus on duration of maternal antibodies in children, with consideration for the vaccination and HIV statuses of the mothers.

Early vaccination against measles in developing countries. H Broutin and MA Miller. *BMJ* 2008;337:a406
Protective efficacy of standard Edmonston-Zagreb measles vaccination in infants aged 4.5 months: interim analysis of a randomised clinical trial. Cesário L Martins, May-Lill Garly, Carlito Balé, Amabelia Rodrigues, Henrik Ravn, Hilton C Whittle, Ida M Lisse, Peter Aaby. *BMJ* 2008; 337:a661

Malaria transmission rate change linked to kids' ages

For the first time, malaria transmission rates have been linked to the age of children seen in hospitals in rural coastal Kenya, where the disease has declined significantly in the past few years, new research led by a Fogarty scientist says.

Dr. Wendy P. O'Meara and colleagues, including Fogarty senior scientist **Dr. F. Ellis McKenzie**, described efforts to draw public health conclusions about malaria in the Kilifi region of the country.

"Data ... show for the first time the direct relationship between changing transmission intensity and the mean age of clinical disease," they wrote in the *American Journal of Tropical Medicine and Hygiene*.

They looked at longitudinal data from 16 years and suggested that the rise in mean age of hospital admissions for fever among children from 2.9 years to 4.9 years represented a better measure of changing transmission intensity than does incidence of disease.



Photo: Wendy O'Meara
Nutrition counseling is a key part of malaria outreach. The disease can be effectively treated at clinics if diagnosis and drug therapy occurs early enough.

Previous studies have shown that as transmission increases, there is initially a large increase in hospital admissions but then the rate rises more slowly and may even plateau before decreasing slightly.

O'Meara and colleagues said children show symptoms of malaria at younger ages where there is high transmission. In those areas, immunity to clinical illness from parasites develops in early childhood, but often older children and adults are infected without having any illness associated with their infection.

Where there is very low transmission, the risk of clinical disease extends into adulthood, when it is more directly related to the risks of infection than the effect of acquired clinical immunity, O'Meara said.

"Relationship Between Exposure, Clinical Malaria, and Age in an Area of Changing Transmission Intensity." Wendy P. O'Meara, Tabitha W. Mwangi, Thomas N. Williams, F. Ellis McKenzie, Robert W. Snow, and Kevin Marsh. *Am. J. Trop. Med. Hyg.*, 79(2), 2008, pp. 185-191.

Guest Opinion

By Dr. Stuart Rennie

Research benefits must stay local

The concept of the “90/10 gap” has become part of popular consciousness, the idea that only 10 percent of worldwide expenditure on health research and development is devoted to the problems that primarily affect the poorest 90 percent of the world's population.

This concept was based on 1990 figures, and the expenditures on diseases affecting the poor have significantly risen in the meantime. Nevertheless, though hard numbers are difficult to find, there is a sense that there is still a lot of biomedical research going on in low-income countries where the impact on health may be greater in developed countries than the host countries themselves. And, of course, the moral intuition is that this way of conducting research is unjust.

This moral intuition, in turn, gave rise to the idea that health research should be “responsive” to the needs of communities in which the research was conducted.

Inevitably, ‘responsiveness’ has been expressed in different ethical guidelines, and these multiple formulations have rendered the concept ambiguous. When is a research project responsive, and when not? Since all research projects typically include *some* benefits for individual participants or communities, aren't *all* of them responsive in a sense? If the concept of responsiveness stays indeterminate, it has no teeth to criticize actual research projects and hence to help counteract the “90/10 gap.”

At worst, it just ends up being another stock phrase in global research ethics circles, bounced around at conferences, and ignored by those with power in international research.

In the July 5 issue of *The Lancet*, Alex John London and Jonathan Kimmelman attempt a definition: “... (P)rotocols should be defined as responsive to the health needs of the host community only if they are part of a program of inquiry that will expand the capacity of health-related social structures in the host community to meet urgent health needs.”

There will be inevitable discussions about whether such-and-such study passes or does not meet the responsiveness definition. But the proposed definition will at least do away with arguments that an international research project is responsive just because a laboratory has been set up or a couple of field workers have been hired to facilitate a project that has, in fact, little to do with urgent health needs of the local population.

Rennie is project manager of a Fogarty bioethics grant. The views expressed here are not necessarily those of the Center, the NIH or the Department of Health and Human Services.

Global Health Briefs

PEPFAR funding extended, expanded

President Bush recently signed legislation that would dramatically expand U.S. aid to \$48 billion over the next five years to fight HIV/AIDS, tuberculosis and malaria around the world.

The program hopes to provide treatment for at least 3 million people, prevent 12 million new infections and care for 12 million people. The extension of the President's Emergency Plan for AIDS Relief (PEPFAR) also would support the training of at least 140,000 new health care workers.

<http://tinyurl.com/5ahtq3>

G-8 declaration on Africa

Leaders of the major industrialized countries pledged to continue efforts to fight infectious diseases in Africa and work toward universal access to HIV/AIDS prevention, treatment and care by 2010. They also promised support to ensure that all African children have access to basic health care by 2015.

<http://tinyurl.com/6ow78t>

Thompson joins NTD battle



Former HHS Secretary Tommy Thompson has become an “ambassador” with the Global Network for Neglected Tropical Diseases under the auspices of the Sabin Vaccine Institute, headed by Fogarty board member **Dr. Peter Hotez**.

“It is a tragedy that the world's poorest citizens are suffering from diseases that have been neglected for too long, particularly when we can treat many of them for less than 50 cents a year,” Thompson said, adding, “When we help others, we also help ourselves.”

Billionaires take aim at tobacco

The foundations run by Microsoft founder **Bill Gates** and New York Mayor **Michael Bloomberg** have pledged \$500 million to get people—mostly in low- and middle-income countries—to stop smoking.

The World Health Organization estimates that tobacco will kill 1 billion people in this century if there are no massive interventions.

The money will coordinate efforts by a coalition consisting of the Bloomberg Initiative to Reduce Tobacco Use, the WHO, the World Lung Foundation, the Johns Hopkins Bloomberg School of Public Health, the Foundation of the Centers for Disease Control and Prevention and the Campaign for Tobacco-Free Kids.

<http://tinyurl.com/6r6v4w>

PEOPLE

Herrington sees Norway's health leaders

Dr. Jim Herrington, Fogarty's director of international relations, met with Norway's health leadership this summer to discuss expanding biomedical and biobehavioral research exchange programs with the United States.



UNESCO Heritage Site,
Bergen, Norway

He also delivered a keynote address to a national meeting of medical deans. Herrington says the Research Council of Norway is interested in developing stronger ties with NIH.

Breman speaks at meeting in Egypt



Dr. Joel Breman, senior scientific advisor in Fogarty's Division of International Epidemiology and Population Studies, addressed leading scientists at the BioVision Alexandria conference in Egypt on the difficulties of translating knowledge about malaria to the most vulnerable populations. The speech and slide show are available at: <http://tinyurl.com/6gt9hd>

Four Fogarty staff win director's awards

Dr. Karen Hofman, head of the Fogarty Division of International Science Policy, Planning and Evaluation (left) and program officer **Dr. Barbara Sina**, in the Division of International Training and Research, won NIH Director's Awards for their "exceptional leadership and commitment" in global health capacity-building.



Cherice Holloway, staff assistant in the Division of International Epidemiology and Population Studies, won the award for "her superior skills in managing and disseminating" the collection of malaria articles in the Fogarty-edited supplements in the *American Journal of Tropical Medicine and Hygiene*.



Center Executive Officer **Timothy J. Tosten** was also cited for his leadership in the design and implementation of the NIH Administrative Fellows Program, which began in spring of 2007.



AIDS group elects Beyrer



Photo: Keith
Weller

Dr. Chris Beyrer, director of the Fogarty AIDS International Training and Research Program at the Johns Hopkins Center for Global Health, has been elected to the governing council of the International AIDS Society.

The Society is the world's leading independent association of HIV/AIDS professionals and runs the International AIDS Conference, the largest regular conference on any health or development issue.

Expert on border risks published

Dr. Steffanie Strathdee, a Fogarty Framework grantee working on academic collaborations in global health, was featured in the *Washington Post* and other newspapers for her studies of AIDS transmission on both sides of the border between San Diego and Tijuana. (See p. 7)



In connection with the 17th International AIDS Conference, she published two papers on the issue and was quoted in the Post as calling the disease "the uninvited hitchhiker."

<http://tinyurl.com/6jymse>
<http://tinyurl.com/5fd5g4>

Grantee chosen as HHMI investigator



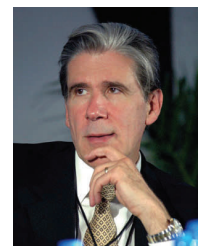
Fogarty grantee **Dr. Erich D. Jarvis**, a neurobiologist at Duke University, has been selected from among 1,070 applicants to become a member of the 2008 class of Howard Hughes Medical Institute investigators.

He joins 55 others with the distinction and will pursue work on the neurobiology of vocal communication in songbirds. Jarvis was the recipient of a 2005 NIH Pioneer Award and won a Fogarty International Research Collaboration Award grant on the same subject.

Harvard names new public health dean

The Harvard School of Public Health has named global health expert **Dr. Julio Frenk** as new dean, effective in January 2009. He will succeed Barry R. Bloom.

Frenk most recently was a senior fellow at the Bill & Melinda Gates Foundation.



FUNDING OPPORTUNITIES

Program	Contact	Receipt Date	Eligibility
Planning Grants for International Malaria, Clinical, Operational and Health Services Research Training Program (MALARIA ICHORTA)	Barbara Sina, Ph.D. sinab@mail.nih.gov	September 15, 2008	Planning grants for malaria research training programs in clinical, operational and public health services in Angola, Benin, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Rwanda, Senegal, Tanzania, Uganda, Zambia.
Global Infectious Disease Research Training Program (GID)	Barbara Sina, Ph.D. barbara_sina@nih.gov	September 16, 2008	U.S. and low- to middle-income institutions with demonstrated history of research collaboration.
Global Research Initiative Program for New Foreign Investigators Basic Biomedical; Global Research Initiative Program for New Foreign Investigators Behavioral and Social Science (GRIP)	Aron Primack, M.D. primacka@mail.nih.gov	September 21, 2008	Low-to middle-income scientists currently or recently supported through Fogarty D43 international training programs through NIH Visiting Program for Foreign Scientists, or as NIDA INVEST or Humphrey Fellowships.
Millennium Promise Awards: Non-communicable Chronic Diseases Research Training Program (NCoD) (D43)	Aron Primack, M.D. primacka@mail.nih.gov	September 29, 2008	Scientists who can assess the magnitude of diseases such as cancer, cerebrovascular disease including stroke, lung disease including chronic COPD, and obesity as well as genetics, environmental factors including indoor air pollution, and lifestyle factors related to these conditions in LMICs.
Fogarty International Research Collaboration Award – Behavioral and Social Sciences (FIRCA-BSS)	Xingzhu Liu, Ph.D. FIRCA@nih.gov	September 29, 2008	Scientists with an active NIH funded research grant and who want to initiate/extend international research collaborations in behavioral and social sciences research.
Fogarty International Research Collaboration Award–Basic Biomedical (FIRCA-BB)	Kathleen Michels, Ph.D. FIRCA@nih.gov	September 29, 2008; January 28, 2009	Scientists with an active NIH funded research grant and who want to initiate/extend international research collaborations in biomedical research.

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Fogarty may help with travel costs

Fogarty will consider supporting Ruth L. Kirschstein National Research Service Award Institutional Research Training Grants by contributing to travel costs.

Trainees would have to spend at least half their time of the award at sites approved for the Clinical Research Scholars and Fellows Program and on work that is of primary importance in those countries.

The deadline for those seeking Fo-

garty support is Jan. 25, 2009, for both AIDS and non-AIDS applications that lead into the May council round.

Contact: **Dr. Aron Primack**, primacka@mail.nih.gov

For a list of approved sites:
<http://tinyurl.com/6h9r83>

For more on the Kirschstein grant:
<http://tinyurl.com/6h6bhd>