

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

## USAID's Shah says science key to global health gains

By Steve Goldstein

Paying tribute to NIH as an institution that envisions the world as it could be, not as it is today, USAID Administrator Dr. Rajiv Shah extolled the role of scientific research in raising health standards around the world. In a major health address at NIH, Shah called for a new global health system that better connects NIH research discoveries with development efforts on the ground "and produces real breakthroughs in our capacity to improve the health of the poor."

Harnessing the power of invention—scientific, technological and behavioral—on behalf of the developing countries is what will make a real impact on improving global health, Shah declared. "We cannot simply seek to do more of the same in an effort to provide services using currently available tools and technologies," he said. "Instead, we need to focus our efforts on facilitating a continuum of invention and innovation from bench to bush."



Photo by Michael Spencer

NIH Director Dr. Francis S. Collins (left) and USAID Administrator Dr. Rajiv Shah (right) said they are working to better connect NIH research discoveries with global health development.

Shah repeatedly cited intramural and extramural research supported by NIH as crucial to enhancing human welfare across the globe.

*continued on p. 4*

## Fogarty program saves lives amid Egyptian turmoil

Photo by M. Shinawi



Cairo protests caused casualties.

The recent political unrest in Egypt has thrust hundreds of thousands of demonstrators into the streets, changed the country's government and shined a spotlight on an NIH-sponsored research training program that is credited with saving lives.

Dr. Jon Mark Hirshon of the University of Maryland's National Study Center for Trauma and EMS has been working with Egyptian doctors for six years to build skills

in injury prevention research. The program, administered by Fogarty, is a collaboration between UMD and Ain Shams University in Cairo and led to the development of a course for the care and evaluation of injured patients.

Hirshon said the program aided in the treatment and evaluation of the many injured who were seen at the hospital and, according to his Egyptian colleagues, was "incredibly helpful in saving lives during the turbulent past week," he said in remarks first reported by MedPage Today/ABC News.

Dr. Mohamed Selim, a surgeon at Ain Shams—one of the

*continued on p. 2*

## FOCUS



### The global cancer epidemic

- The National Cancer Institute works with Fogarty to address the crisis
- Partnerships aim to build cancer expertise in the developing world
- Considering cultural differences when providing cancer care

Read more on pages 6 – 10

# From Russia, with hope

Photo by Jeff Gray



In his meeting with Russian Academy of Sciences' counselor Dr. M.V. Ugrumov, Fogarty Director Dr. Roger I. Glass expressed interest in expanding collaborations.

As part of a continuing dialogue between U.S. and Russian officials to advance scientific collaborations, Fogarty hosted a senior neuroscientist from the Russian Academy of Sciences to explore research areas of mutual interest between NIH and RAS. Dr. M.V. Ugrumov, counselor to the president of RAS, had several days of meetings with NIH and Fogarty staff and made a presentation to a group including Fogarty Director Dr. Roger I. Glass.

"We're discussing potential collaborations between NIH and the Russian Academy of Sciences in neuroscience and other fields," Dr. Ugrumov said in an interview. "For instance, in my country, we really need transgenic mice—to study, to use them to advance research in Parkinson's and Alzheimer's disease. Right now, we have very limited supply."

## Fogarty program saves lives

...continued from p. 1

two closest hospitals to Tahrir Square, the epicenter of the demonstrations—offered a vivid picture of events on Friday, Jan. 28, at the height of the turmoil.

"We had a gush of gunshots, stab wounds, crashes, people hit by stones, a lot of post-concussions, a lot of mortalities, about 25 to 30 mortalities, and a lot of people admitted to the hospital," he said. The emergency room at the hospital normally treats 20 to 30 patients; on this day there were more than 200.

When the crush hit the ER, Selim said the residents who

"We should find opportunities that are pragmatic and of mutual interest," he said, adding that there were ongoing research studies in fetal alcohol syndrome and other brain disorders.

Of mice—and men. Dr. Ugrumov said studies have predicted that the prevalence in humans of neurological diseases will outstrip both heart and cancer disease by 2040.

**In an effort to expand these collaborations and broaden the scientific contact between the two nations, the U.S. - Russia Scientific Forum in Biomedical and Behavioral Research was established during a fall 2009 visit by Dr. Glass to the Russian Academy of Medical Sciences in Moscow.**

Funding for current collaborations with Russia is over \$3.5 million. In an effort to expand these activities and broaden the scientific contact between the two nations, the U.S.-Russia Scientific Forum in Biomedical and Behavioral Research was established during a fall 2009 visit by Dr. Glass to the Russian Academy of Medical Sciences in Moscow. The first sponsor of this public-private partnership is Eli Lilly and Company, whose contribution focused on supporting the forum and a clinical and translational research training program in Russia.

*Previously: Eli Lilly Funds Forum: GHM Oct. 2010/Volume 9, Issue 5*

*U.S., Russia Agree on Research Partnerships: GHM Nov.-Dec. 2009/Volume 8, Issue 6*

had been through the course "were taking the lead during the mass casualties. They knew what to do—how to deal with the patients, how to triage them and how to manage them.

"And really they saved a lot of lives," the surgeon said. The Ain Shams hospital is a modern facility with well-trained doctors and staff, but they have been overwhelmed during the protests, Hirshon said. "But even in the U.S., if you're getting hundreds of people injured, you're going to be overwhelmed," he said.

Selim said the program had prepared them well. "We were exhausted but we know we are doing something for our country, so we are proud of what we are doing," he said.

# Research in viral disease aims at ending malaria

What can the role of research in the eradication of three viral diseases—smallpox, polio and measles—tell us about efforts to eradicate malaria? Quite a lot, according to a new paper published by the Public Library of Science. By examining the research undertaken in the eradication or regional elimination of these viral diseases, cross-cutting lessons were derived that apply to efforts to eradicate malaria.

The authors, among them Fogarty's Dr. Joel G. Breman, stressed the importance of starting laboratory, clinical and field research early in the program and in parallel with eradication efforts. Vaccines will likely be the linchpin interventions, but ongoing research is needed to improve formulations, delivery and immunization schedules. Implementation science principles are being applied. Malaria eradication proponents should understand the importance of combining operational and research issues. In successful elimination initiatives, the best researchers will see their ideas implemented and the best implementers will continue to ask what research could further improve operations.

Because these eradication efforts can be impeded by socio-cultural, religious and local politics, efforts should be made to improve ways to communicate effectively with local populations about the disease and the interventions to eradicate it. Finally, experience with all the viral disease programs has shown that interrupting the last vestiges of transmission is particularly problematic and requires allocation of many resources, including support for focused final stages research activities.

Related to this, the WHO World Malaria Report revealed that increased financing over the past decade—despite a dropoff last year—has resulted in significant progress in improving access to insecticide-treated mosquito nets in the past three years. By the end of 2010, approximately

289 million such nets have been delivered to sub-Saharan Africa, enough to cover 76 percent of the 765 million persons at risk of malaria.

But the efficacy of these nets is exhausted over three years and replacing them poses an enormous challenge. Problems are also posed by the potential that mosquitoes become resistant to the most commonly used insecticides, the pyrethroids, and the need to differentiate malaria from non-malarial fevers prior to treatment. WHO now recommends that all cases of suspected malaria be confirmed with a diagnostic test prior to treatment.

A total of 11 countries and one area in the WHO African Region showed a reduction of more than 50 percent in either confirmed malaria cases or malaria admissions and deaths in recent years.

While progress in reducing the malaria burden has been remarkable, the report said, there was evidence of an increase in 2009 in malaria cases in three countries: Rwanda, Sao Tome and Principe, and Zambia. Since many countries in sub-Saharan Africa had inadequate data to monitor disease trends, greater efforts need to be made to strengthen routine surveillance systems.

*The Role of Research in Viral Disease Eradication and Elimination Programs: Lessons for Malaria Eradication. PLoS January 2011 Vol. 8, Issue 1, [www.plosmedicine.org](http://www.plosmedicine.org)*



A young malaria patient in Ethiopia.

Photo courtesy of WHO/P.Violi

# President requests small increase for Fogarty

Fogarty received a modest increase in President Obama's 2012 budget proposal, coming in a period when demand for deficit reduction is placing budgets under pressure. The fiscal year 2012 budget request of \$71.328 million represents an increase of \$1.335 million, or 1.9 percent, over fiscal 2010, with the final budget for fiscal 2011 still pending.

The U.S. government has made improving global health a national priority, said Fogarty Director Dr. Roger I. Glass,

"and for these investments to yield the maximum benefit we must have people in place here as well as around the globe to generate the scientific evidence that will inform how best to allocate resources. So we're pleased that there is recognition of the funding needed to accomplish this."

The White House budget request marks the beginning of months-long discussion and negotiation before a final number is approved.

## USAID's Shah says science key

...continued from p. 1

The USAID chief delivered the David E. Barmes Global Health Lecture on Feb. 15 before a nearly full Masur Auditorium in the Clinical Center. In his introduction, NIH Director Dr. Francis S. Collins noted that this was believed to be the first-ever address to NIH staff at-large by a sitting USAID administrator and symbolized a closer relationship between the two agencies. The two directors share a connection with the University of Michigan, where Collins taught and where Shah received his undergraduate degree. The Barmes Lecture is sponsored by Fogarty and NIDCR, where the late Dr. Barmes worked. Among those attending was former Minnesota health executive Lois Quam, the newly-named executive director of the Global Health Initiative.

Shah opened his remarks by praising NIH for representing one of America's competitive advantages: advancing science, technology and innovation aimed directly at improving human welfare. "If we can harness that capability for the poorest communities in the world, we can leave an unparalleled legacy in global health in this next decade," he said.



Photo by Michael Spencer

Newly-named Global Health Initiative executive director Lois Quam met with Shah and Fogarty Director Dr. Roger I. Glass after Shah's speech.

The litany of health challenges is long and daunting, Shah explained. For example, a woman in southern Sudan is more likely to die in childbirth than finish high school. Vaccines represent the "most transformative" breakthrough for saving lives, he said. The development of new vaccines is the best investment that can be made in efforts to combat malaria, tuberculosis and HIV/AIDS. A "cheap, effective" vaccine is the best hope for eradicating malaria, declared Shah. NIH research can help reduce the length of therapeutic regimes for TB as well. Developing a vaccine for HIV/AIDS is necessary for "closing the chapter" on its brutal history.

Shah cited the Center for the AIDS Programme of Research in South Africa, at the University of KwaZulu-Natal in

Durban, an NIH grantee, for its work on a gel microbicide for women to protect themselves from HIV infection. He said USAID was prepared to work with NIH to accelerate further testing and regulatory approval of this potential breakthrough. Circumcision campaigns have also been effective, he explained, adding that it was NIH that first discovered the "dramatic effect" circumcision could have in limiting the transmission of HIV. Reducing mother-child transmission of HIV is another approach that can be strengthened.

Equally important must be technologies to protect maternal and child health, from reducing maternal mortality to decreasing birth asphyxia. An NIH-funded study, First Breath, inspired USAID to join the fight against birth asphyxia, Shah noted.

Science and innovation form the tip of the spear in meeting the health challenges in the developing world. To this end, Shah said USAID will develop a "center of excellence" to accelerate product development and field introduction, bringing in industry experts and academic researchers to consult and investing "seed capital" in promising ideas. USAID will launch a series of new scientific and technical challenge grant programs, designed to trigger innovations such as new diagnostics for community health workers and expanding the use of mobile phones to connect to health facilities.

The world as it could be, Shah asserted in closing, is one where the vaccinations afforded his recently-born third child were equally available to a child born in east Africa. "We look forward to being a partner with you, as the inventors and visionaries ... that will allow us to succeed," he said.

Transcript: [www.usaid.gov/press/speeches/2011/sp110215.html](http://www.usaid.gov/press/speeches/2011/sp110215.html)

Archived webcast: <http://bit.ly/hB6FPT>

## QDDR: USAID role in global health is enhanced

The first-ever Quadrennial Diplomacy and Development Review by the U.S. State Department will cause a wide-ranging recalibration of how federal agencies exercise civilian power abroad. Specifically, USAID is granted immediate leadership responsibilities for the food security initiative, Feed the Future, and will assume responsibility for the ambitious Global Health Initiative at the end of 2012, subject to achieving performance and competency benchmarks.

Report: [www.usaid.gov/qddr/QDDR\\_Executive\\_Summary.pdf](http://www.usaid.gov/qddr/QDDR_Executive_Summary.pdf)

## PEPFAR adopting implementation science

As the U.S. President's Emergency Plan for AIDS Relief grows and matures, it is adopting an implementation science framework to improve the development and effectiveness of its program at all levels. PEPFAR's plans for systematic application of an implementation science framework is outlined in an article in the *Journal of Acquired Immune Deficiency Syndrome* by Global AIDS Coordinator Dr. Eric Goosby and other colleagues, including Fogarty's Rob Lyerla, currently detailed to the Office of the Global AIDS Coordinator.

Implementation science is the study of methods to improve the uptake, implementation and translation of research findings into routine and common practices, sometimes referred to as the "know-do" or "evidence-to-program" gap. PEPFAR, active in over 32 countries, is designed to implement programs that deliver locally appropriate and evidence-based HIV prevention, care and treatment in the developing world in order to save as many lives as possible.

Evaluation of individual interventions of care and treatment are useful, but not sufficient when attempting to assess programs as complex as PEPFAR.

The authors describe an implementation science framework to be used that includes monitoring and evaluation, operations research and impact evaluation, which should provide a broader framework for a full assessment of both the effectiveness and efficiency of programs.

In the next phase of PEPFAR, emphasis will be placed on the delivery of knowledge about HIV/AIDS program implementation to the global community. An implementation science framework will permit identification of high-priority implementation questions and development of tools to provide the answers.

Full article: <http://bit.ly/eOwcUU>

## U.S., Russia team in polio eradication effort

Russia, which has seen outbreaks of polio in recent years, is partnering with the United States on a new initiative to eradicate the disease.

An agreement to work together on polio eradication was signed in late January by USAID, HHS and the Russian health ministry. USAID Administrator Rajiv Shah said, "I am excited by the potentially huge impact that we can have when combining our countries' respective talent and expertise to overcome our world's development challenges."

Polio persists as a stubborn scourge despite the 22-year effort of the Global Polio Eradication Initiative, which has achieved a 99 percent reduction in polio worldwide. But recent years have witnessed outbreaks in Central Asia and several cases in Russia of the highly infectious disease.

One in 200 infections leads to irreversible paralysis and, among those paralyzed, between five and 10 percent die. "Ridding the world of this preventable disease will dramatically reduce the global burden of disability and death from polio," said HHS Director of Global Health Affairs Nils Daulaire.

"We are pleased to have this opportunity to strengthen our partnership with our Russian colleagues."



The poliovirus may cause deformities in the limbs.

Photo courtesy of CDC

## UNESCO releases 2010 science report

UNESCO's latest science report describes a shifting research and educational environment that is increasingly competitive and broader-based. China and India are using their growing economic power to invest in high-tech companies in Europe and elsewhere to quickly acquire technological expertise. Emerging economies such as

Brazil, Mexico, South Africa and Turkey are spending more on research and development. China is close to counting more researchers than either the United States or the European Union. The trend is fostering a worldwide democratization of science.

Full report: <http://bit.ly/dVuolj>

# Cancer takes growing toll in developing world

Cancer and other chronic diseases are reaching epidemic proportions globally and are taking a particular toll on populations in the developing world. The increase is partly due to the aging population but is also the result of their adoption of cancer-causing behaviors, such as a western diet, smoking and a sedentary lifestyle.

More than half the global cancer deaths in 2008 occurred in the developing world, according to WHO estimates. Breast cancer is the leading cause of cancer death among females in poor countries, with lung cancer claiming the most lives of males who die of cancer, according to a recent analysis published in an American Cancer Society journal.

**The increase in cancer and other chronic diseases is partly due to the aging population but is also the result of their adoption of cancer-causing behaviors, such as a western diet, smoking and a sedentary lifestyle.**

Cancer survival tends to be poorer in developing countries, most likely because of a combination of late diagnosis and limited access to treatment, the study suggests. Many cancers could be prevented by applying existing knowledge, implementing tobacco control programs, vaccinating against liver and cervical cancers, providing early detection and treatment, and instituting public health campaigns promoting healthy diets and exercise.

To combat this crisis, the National Cancer Institute at NIH has been working on numerous fronts throughout the developing world, including establishing cancer registries, increasing the availability of palliative care and supporting research training in cancer so the scientific capacity exists to help combat the disease.

For example, in 1996 NCI helped establish the Middle East Cancer Consortium, a unique partnership between the U.S. and the health ministries of Cyprus, Egypt, Israel, Jordan, the Palestinian Authority and Turkey. The consortium's initial activity was to establish cancer registries and network them across borders. The registries are an important tool that can be used to inform public health

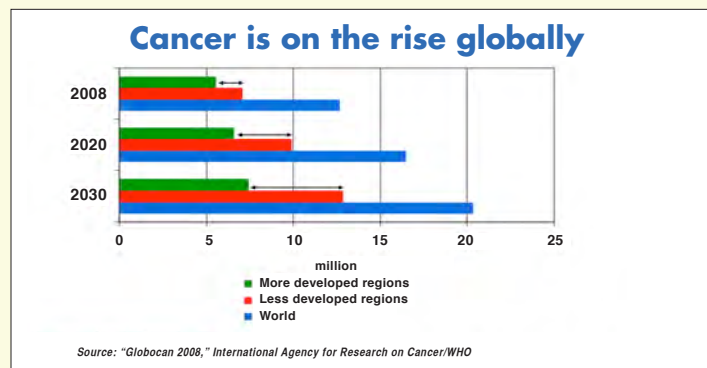
planning, cancer research and cancer control programs. The initiative also supports cancer research collaborations and helps increase the availability of palliative care and information about its role in treatment plans.

For nearly a decade, NCI has partnered with Fogarty to combat tobacco consumption in low- and middle-income countries by supporting trans-disciplinary research and capacity building projects. The program funds efforts that pursue research of local importance and build capacity in epidemiological and behavioral research, prevention, treatment, communications, health services and policy research.

More recently, NCI partnered with Fogarty to launch the U.S.-Latin America Cancer Research Network, an effort to support high-quality research and clinical studies. The network—currently operating in Argentina, Brazil, Chile, Mexico and Uruguay—is charged with developing a comprehensive understanding of the status of the cancer disease burden, research enterprise and care infrastructure in each country.

A program building research capacity on the topic of HIV-associated malignancies in sub-Saharan Africa is the latest joint effort by NCI and Fogarty. In 2010, three-year grants were awarded to eight sub-Saharan African countries to train scientists on this critical research area.

*For more information about these and other NCI efforts to combat the global cancer epidemic, visit: <http://bit.ly/eXZNU>. "Global Cancer Statistics." CA: A Cancer Journal for Clinicians, Feb. 4, 2011.*



The stories in this special section were developed by the National Cancer Institute and originally published in the NCI Cancer Bulletin. The full versions are available at <http://bit.ly/eZoJN>

# Partnerships aim to build cancer expertise abroad

By Sharon Reynolds

If current trends continue, by 2020 a majority of cancer cases will occur in the developing world, according to the WHO.

This threatens to overwhelm the medical infrastructure in developing countries, where physicians often do not have access to even the most basic chemotherapy drugs or radiation therapy equipment. In addition, developing countries suffer “brain drain,” whereby physicians and researchers leave their home countries in search of facilities and funding for their work abroad. “I think human capital can often be the more challenging thing to get and maintain,” said Dr. Norman Coleman, associate director of the Radiation Research Program (RRP) at the NIH’s National Cancer Institute.

“A lot of times people go and give a lecture or two and maybe spend a few days somewhere. But to really make a difference, to maintain progress, you have to stay engaged in a sustained manner, for a period of years,” he said. “What is needed is a means of sustainability by which the time commitment for mentoring is a bona fide part of one’s career,” Coleman emphasized. “In-kind donations and volunteerism are welcome, but long-term commitment is crucial.”

The two radiation oncologists envision funding for the CEC mentors coming from peer-reviewed grants that individuals and institutions would compete for through mechanisms similar to standard research grants. The funding allocated for one regular full-time equivalent clinician or researcher through a typical NIH grant could fund about 20 percent of the professional time of five CEC mentors and provide financial and institutional support for their mentoring activities.

“That would make mentoring a legitimate professional track, something that’s valued by a mentor’s institution, a ‘Peace Corps for Cancer’—people wouldn’t just have to do it on their nights and weekends,” said Coleman. “That’s what happens now—people use up their vacations, their weekends; they put all their free time into these projects and eventually they burn out.”

Modern telemedicine technology, like that adopted in 2004 with NCI support at King Hussein Cancer Center in Amman, Jordan, would allow mentors to coordinate activities such as chart rounds and quality control without extensive travel time, explained Coleman. Investment in infrastructural technology would also allow its use by physicians working in other areas of medicine, such as diabetes and cardiovascular disease, perhaps someday allowing the expansion of the concept to a broader Medical Expert Corps, he continued.

A pilot project is underway attempting to connect international mentor-mentee pairs with appropriate funding opportunities. These research pairs were identified through a call for interested participants distributed by the American Society of Clinical Oncology, the International Union Against Cancer, and other professional groups. Out of about 50 interested teams, six pairs are now working to identify grants for which they can apply.

Photo courtesy of NCI



Telemedicine systems such as TESLESYNERGY®, pictured here, allow doctors on different continents to collaborate on patient care in real time.

Since 2000, Coleman and his colleague, Dr. Bhadrasain Vikram, have been working on the idea of a Cancer Expert Corps (CEC)—a cadre of tenure-track health care professionals dedicated to committing a percentage of their time to mentoring cancer care providers and cancer researchers in the developing world and helping clinicians and researchers who want to return home to establish world-class programs.

The idea of a dedicated, long-term commitment sets the CEC apart from other mentoring efforts, explained Vikram.

# Researchers advance cancer care in Bangladesh

By Edward R. Winstead

Many women in Bangladesh struggle to find the resources just to feed their families. If they develop a health issue such as breast cancer, many don't seek treatment due to the cost and other barriers.

Wisconsin-based Dr. Richard Love and his International Breast Cancer Research Foundation are working to create four breast-problem clinics and one specialty outpatient diagnostic and treatment center in Bangladesh. Love, who is also a professor of medicine and public health at Ohio State University and grantee of the NIH's National Cancer Institute, believes that understanding the traditions of the people who live with cancer is critical to improving their health care.



Photo courtesy of NCI

Staff at Bangladesh's Breast Care Center developed the first Web-based electronic medical record system in the country.

The radiation center Love is planning would also provide education for patients and training for people interested in working in the field. No facilities for this kind of treatment currently exist anywhere in the Khulna region of Bangladesh; the researchers estimate that there are perhaps 18 operational radiation therapy facilities in the entire country, whereas approximately 300 may be needed.

"Radiation is a really useful modality, especially for the locally advanced cancers you tend to see in this population," said Dr. Norman Coleman, who is associate director of the Radiation Research Program at NCI and who has consulted on the project as a private citizen. "Dr. Love has defined a need, and he's successfully conducted clinical trials in the region because he's there on the ground. The question now is whether he can get philanthropic support."

There are not only economic barriers to providing treatment to the poor, uninsured population but cultural challenges as well.

"Human rights issues stand in the way of doing anything about cancer," Love said. "If you can get over the economic issues and the health-system issues, you're still left with daunting cultural challenges and you need to find a way around these."

These challenges became evident when the researchers were trying to recruit women to a clinical trial. Accrual was slow in part because few health services existed for the women and most women felt that, because of their place in the family, they should not seek help. The researchers are now trying to develop a team of social scientists to investigate the complex issues that may explain this behavior and to test some interventions.

The researchers developed the country's first free walk-in breast clinic, where women are seen by a female doctor and a medical assistant, who provide advice and supportive care.

Love has made progress in planning the new radiation therapy center. The current proposal estimates that many patients could receive a course of radiation treatments for \$125, compared with thousands of dollars in the United States.

Through technologies that now exist, radiotherapists in the United States can work closely with colleagues in places like Bangladesh. Using "dummy" human tissues that have devices for measuring radiation, workers in a remote center can test their radiation machines to make sure they are delivering the specified dose. Furthermore, radiological data from remote locations can be deposited in a centralized location for a trial's principal investigators to review.

**The researchers developed the country's first free walk-in breast clinic, where women are seen by a female doctor and a medical assistant, who provide advice and supportive care.**

"These tools would be a good way to bring a place as remote as Bangladesh into cancer clinical trials," said Dr. James Deye, a colleague of Dr. Coleman's in NCI's Radiation Research Program. The technologies could provide assurance that a remote site is following the protocol of a particular trial and also be educational.

The center is being developed as a "social business," and any profits would go to its expansion. The hope is it could be a prototype for a successful social business in radiation therapy and could be replicated in other low-resource settings.



# Considering culture when providing treatment

By Elia Ben-Ari

One of the hardest tasks an oncologist faces is telling children with cancer and their families that there is no longer hope of a cure and that the time has come to discuss end-of-life care. For Dr. Myriam Weyl Ben-Arush, head of pediatric oncology at Rambam Medical Center in Haifa, Israel, this task is complicated by the fact that her young patients may be Israeli or Palestinian; Jewish, Muslim, Christian or Druze; religious or nonreligious.

Photo by Alan Gignoux/World Bank



*Different cultures in the Middle East have different views on palliative care, treatment for patients with serious or life-threatening conditions.*

Working effectively in cross-cultural situations such as this is known as cultural competence. In medicine, cultural competence means providing health care services that are respectful of and responsive to the health beliefs, practices and cultural and linguistic needs of diverse patients.

“In the area of palliative care, culture comes into it in a big way,” said Dr. Joe Harford, director of international affairs at the NIH’s National Cancer Institute. “Different cultures have different views of life, death and pain—and those need to be appreciated.”

Palliative care improves the quality of life for patients who have a serious or life-threatening disease and is more effective when provided early.

Harford’s office oversees the Middle East Cancer Consortium (MECC), a partnership between the United States and the health ministries of Cyprus, Egypt, Israel, Jordan, the Palestinian Authority and Turkey. In 2005, an effort was begun to build capacity for palliative care.

“The project was established to raise awareness of the palliative care problems shared by all MECC members,”

said the consortium’s director, Dr. Michael Silbermann of Haifa. “It is based on identifying common ground across cultures and relying on their shared interest in establishing palliative care services, as a basis for developing dialogue and cooperation on sustainable cancer care in both hospitals and the communities.”

**In medicine, cultural competence means providing health care services that are respectful of and responsive to the health beliefs, practices and cultural and linguistic needs of diverse patients.**

As part of this effort, the consortium has conducted workshops and training. One of the goals is to overcome the fear of opioids, which is a major barrier to providing adequate pain management for cancer patients. The initiative also addresses the needs of children through a group chaired by Dr. Aziza Shad, director of pediatric oncology at Georgetown University Hospital in Washington, D.C.

“No matter what culture you come from, death is the same for everyone. What is important is how you accept it and deal with it,” said Shad. “The differences lie in how the family hierarchy works, and who decides how much information on prognosis or end-of-life should or should not be given to the family members or the dying child.”

If caregivers don’t tell the truth, Ben-Arush explained, “the child will lose his belief in the staff, and he won’t cooperate any more...and he will suffer much more, because we need the child [to] explain to us how we can help him.”

Ben-Arush noted that it’s somewhat easier to talk about death with a Druze family that believes in reincarnation or an Arab Christian family whose child believes in heaven. By contrast, she said, “it is much more difficult for Jewish families to accept that there is no more treatment.” They are more likely to ask for experimental therapies for their child and less likely to sign a do-not-resuscitate order, she added.

MECC leaders are now working to introduce basic guidelines for palliative care in the Middle East. After five years of effort, the project is starting to bear fruit.

For more information, visit <http://mecc.cancer.gov/>

# Health diplomacy: where science meets culture

By Dr. Jorge Gomez



International research collaborations are critical to our success in fighting cancer—a problem so immense that we must gather ideas from scientists everywhere so that we can confront the disease in the most comprehensive way possible.

In addition to forging ahead with partnerships that have data as the chief priority, researchers and organizations should allow

time to plan for other aspects of their projects that can produce surprising, long-lasting and mutual rewards.

Representatives from developed countries who partner with colleagues from less developed nations, where the burden of cancer is often very high, serve as ambassadors. As ambassadors, we need to recognize that our collaborators in developing countries may struggle to acquire the technologies, systems and information that we take for granted.

Another important consideration is the protocol for our collaboration. Many of the policies and safeguards upheld by NIH and other U.S. federal agencies for the protection of human subjects participating in clinical research, as well as for data integrity and monitoring, may be difficult to enforce beyond our borders. We must encourage and promote “best practices” in research outside of this country as we do in the United States.

Our interactions with foreign collaborators must be respectful of their customs, culture and the idiosyncrasies of their nations as a whole—at the local, regional and national levels—as well as of their laws and regulations. Every project affords the opportunity to enhance their research infrastructure and research capacity, such as biospecimen repositories. Moreover, our interactions must be based on our mutual professional respect, where foreign collaborators are an integral component of the team. This should be evident in the planning, implementation, data analysis and publications.

In short, these collaborations should contribute to science, but they should also strengthen the relationships between countries, increase research capacity for both nations and

serve as a model for others to follow.

What does such an international collaboration look like? The United States–Latin America Cancer Research Network is a great example.

The initiative recently launched a pilot study—which will involve staff at more than 20 hospitals and research facilities in Argentina, Brazil, Chile, Mexico and Uruguay—to examine the molecular profiles of breast cancer patients and their response to treatment.

We already know that breast cancer is a collection of many subtypes with different genetic and clinical characteristics. We also know that breast cancer is less common in Latin American women than in women from developed countries. What we learn in this study will help us better understand how to categorize breast cancer, as well as how to best treat different breast cancer subtypes.

The health diplomacy of this project lies in the details. The study design, clinical protocol, informed consent and case report forms were developed in collaboration with international partners through committees that brought together the disciplines of public health, international affairs, management, law and economics. The collaborators participated in workshops and webinars and contributed to the development of standardized procedures for biospecimen collection, pathology, biomarker assessment and evaluation of patient response to therapy.

In essence, we are enhancing their research infrastructure so that they will be able to conduct clinical trials in the future that incorporate the latest genomic and applied technologies that are becoming standard in the United States and other developed countries.

Improving infrastructure is just one element of good diplomacy in international research collaboration. The goal is to treat our collaborators as equal partners and provide resources to enhance the development of areas where they may be lacking, such as training or applied technologies.

*Dr. Jorge Gomez is Director of the Office of Latin American Cancer Program Development at NIH's National Cancer Institute. An expanded version of these remarks was previously published in the NCI Cancer Bulletin. For more information, visit <http://www.cancer.gov/aboutnci/organization/olacpd/researchnetwork>*

## PEOPLE

Global  
HEALTH Briefs**Two distinguished retirements at Fogarty**

Dr. Joel G. Breman, a senior scientist at Fogarty for 15 years, has retired from NIH after a long and illustrious career. Trained in internal medicine, infectious diseases and epidemiology, Breman joined Fogarty in 1995 and served as Deputy Director of the Division of International Training and Research, director of several infectious diseases and research and training programs and Senior Scientific Adviser. Among a lifetime of accomplishments, Breman worked on smallpox and measles in Guinea, endemic diseases in Burkina Faso, ebola hemorrhagic fever in the Democratic Republic of Congo and malaria at the CDC. He has authored over 100 publications on infectious diseases and research capacity strengthening in developing countries.



Dr. Duane Alexander, Fogarty's senior scientific adviser for global maternal and child health research, is also retiring. Alexander was the longtime director of the Eunice Kennedy Shriver National Institute of Child Health and Human Development. He was recently honored for his work in helping to cut sudden infant death syndrome cases in half and the reduction of mental retardation from Hib meningitis. He joined Fogarty in the fall of 2009 to help coordinate the NIH role in the administration's Global Health Initiative.

*Both men will retain their Fogarty connection as senior scientist emeritus.*

**Quam to run Global Health Initiative**

Minnesota health executive Lois Quam has been named by the U.S. State Department as the new executive director of the Global Health Initiative. Quam, a former UnitedHealth Group executive, was a senior adviser to then-First Lady Hillary Clinton's health care task force in the mid-1990s. The GHI is aimed at helping developing nations fight disease, improve nutrition and provide more aid for pre- and postnatal care.

**Steven Smith new health attaché in Delhi**

Steven Smith, former Director of the National Institute of Allergy and Infectious Diseases' Office of Global Research, has been appointed the HHS Health Attaché in New Delhi, India, replacing Dr. Danuta Krotoski who was serving as acting health attaché. Smith will serve as the main contact for health cooperation and social policy issues related to HHS and Indian interactions. Smith also worked overseas for the State Department in Cameroon, South Africa and Haiti.

**Honors for Dr. Xiang**

Fogarty research grantee Dr. Hiyun Xiang received two awards from The Research Institute at Nationwide Children's Hospital as the 2010 Outstanding Principal Investigator and the 2010 Outstanding Mentor. As a mentor, Dr. Xiang worked with Fogarty Scholars and hosted other international scholars and students. He had five mentee publications and his USA-China Agricultural Injury Research Training Workshop trained 25 researchers in Xi'an, China in 2010.

**WHO releases eHealth atlas**

WHO has released an atlas on the current status of eHealth, providing data on the 114 member countries that participated in its 2009 survey. Country profiles feature 50 key indicators of eHealth infrastructure development as well as progress on specific eHealth applications. Full report: <http://bit.ly/g8Z0XF>

**CSIS reports on global health**

The Center for Strategic and International Studies has launched a report entitled, "Key Players in Global Health: How Brazil, Russia, India, China and South Africa Are Influencing the Game." This report represents the first step in an 18-month CSIS initiative focused on how the BRIC countries and South Africa are influencing activities, practices, and strategies in the area of global health diplomacy. Abstract at: <http://bit.ly/9wJX6V>

**Data center at Guttmacher Institute**

A new data center produced by the Guttmacher Institute is a resource on international reproductive health issues, including country and regional data on safe and unsafe abortion rates, intended and unintended pregnancy rates, maternal health care provision, contraceptive use and unmet demand for family planning and reproductive health indicators for adolescents. Online at: [www.guttmacher.org/idc/](http://www.guttmacher.org/idc/)

**Data should be shared widely**

Research data should be made more widely available if researchers are to unlock its full potential and make progress in public health, according to a group of the world's top health funders. NIH, CDC, the World Bank, the Bill & Melinda Gates Foundation and 13 other major funders issued a joint statement calling for cooperation to support timely and responsible data sharing. Full report: <http://bit.ly/hLLt6Q>

## Funding Opportunities

Program	Contact	Receipt Date	Eligibility
Limited Competition for the Global Research Initiative Program, Basic/Biomedical Sciences (GRIP-BB) (R01) PAR-10-278	Xingzhu Liu, M.D., Ph.D. Xingzhu.Liu@mail.nih.gov	AIDS Applications: March 10, 2011	Eligible applicants, scientists from low- and middle-income countries, must have completed their research training by the project start date, but not more than four years prior to announcement's receipt date; research training that was supported under the specified NIH-funded awards (see FOA for list); and substantial research training experience.
Limited Competition for the Global Research Initiative Program, Behavioral/Social Sciences (GRIP-BSS) (R01) PAR-10-280			
Limited Competition: Brain Disorders in the Developing World (BRAIN –AIDS) (R01) PAR-11-030	Kathleen Michels, Ph.D. Kathleen.Michels@nih.gov	April 11, 2011	The low- and middle-income country (LMIC) collaborator must be at an institution in a country as defined by The World Bank. R01 (PAR-11-030) applicants must have already had an R21 planning grant under the companion announcement, and must have documentation that a participating partner agrees to accept assignment of the application.
Brain Disorders in the Developing World (BRAIN – AIDS) (R21) PAR-11-031			
International Research Ethics Education and Curriculum Development (BIOETH-ICS) (R25) PAR-10-174	Barbara Sina, Ph.D. Barbara.Sina@nih.gov	May 10, 2011	The applicant should have documented experience in international research ethics and be capable of providing both administrative and training leadership to the development and implementation of the proposed research education program. More than one PD/PI may be designated on the application for projects that require a "team science" approach.

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

## Global Health Matters

January/February 2011

Volume 10, No. 1 ISSN: 1938-5935

Fogarty International Center  
National Institutes of Health  
Department of Health Human Services  
Publication No. 07-5369

Managing editor: Ann Puderbaugh  
Ann.Puderbaugh@nih.gov

Editor/writer: Steve Goldstein  
Steven.Goldstein@nih.gov

Web manager: Anna Pruett Ellis  
Anna.Ellis@nih.gov

Designer: Carla Conway

*All text produced in Global Health Matters, with the exception of the Guest Opinion, is in the public domain and may be reprinted. Please credit Fogarty International Center. Images must be cleared for use with the individual source, as indicated.*

## UPCOMING EVENTS

### NIH Conference on the Science of Dissemination and Implementation: Policy and Practice

March 21-22, 2011

Bethesda North Marriott Hotel & Conference Center

The fourth annual conference is designed to stimulate conversation among researchers in the field and will include panels of scientific leaders and think tanks, in addition to traditional plenary sessions, concurrent oral presentation sessions and poster sessions.

**For more info, visit <http://bit.ly/cAhJa6>**

### NIH Sponsored Training on Impact Evaluation Using Randomized Trials

March 21-22, 2011

Bethesda North Marriott Hotel & Conference Center

Fogarty is organizing this workshop in partnership with the Abdul Latif Jameel Poverty Action Lab (J-PAL), a network of empirical research economists who specialize in international development and have acquired substantial expertise running randomized evaluations in such settings. Researchers in the J-PAL network have adapted the driving characteristic of randomization of the treatment to test the effectiveness of health programs and policies in what are often difficult environments.

**For more info, visit <http://bit.ly/fhM3P2>**

Subscribe to the e-newsletter by visiting [www.fic.nih.gov/news/subscriptions.htm](http://www.fic.nih.gov/news/subscriptions.htm)