Shelters from the Storm
Sex-Based Defenses Against Disease
I was in Australia, at a conference of academic health leaders, when the earthquake and tsunami struck Japan on March 11. My Japanese public health colleagues at the conference soon faced the challenge of how to best help their country.

As the disaster evolved into a nuclear crisis, they did just what we would have done. They provided evidence-based recommendations about how to reduce the risk of infectious disease, prevent post-traumatic stress disorder and minimize radiation dangers.

The first mission is always preparedness, ensuring that skilled professionals and infrastructure are in place and ready before disasters occur. The Bloomberg School’s Public Health Preparedness Programs, for example, have trained more than 60,000 U.S. public health and safety professionals in disaster preparedness and response. And our Center for Refugee and Disaster Response (whose work is documented on page 16) has trained more than 500 people from governments and NGOs worldwide in preparing for population-level health emergencies. At least a half-dozen of our Japanese and South Korean alumni were directly involved in Japan’s response.

Immediately after a disaster, people need information almost as much as they need food and water. They need to know what they should and shouldn’t do, where they can get shelter and safe water, and so on. Risk communications is incredibly important, but it can be hard for government leaders to balance their message so that people are motivated to do the right thing but not so frightened as to panic.

In search of that kind of knowledge, the media often seek out our faculty. Case in point: As Japan’s nuclear crisis unfolded, journalists did multiple interviews with Jonathan Links, a radiation expert and director of the Public Health Preparedness Programs. He explained the immediate risks from Japan’s nuclear disaster (including when it’s appropriate to take potassium iodide) and shared his insights into our own country’s nuclear power infrastructure.

And, in 2006, our Center for Communication Programs conducted media campaigns in the Baltimore region to persuade people to assemble home emergency response supplies (including water, a portable radio and flashlight). This way, people in the community—not just the government and NGOs—know their responsibilities in preparedness. Another key area is coordination. When a disaster shatters normal life, humanitarian groups of all stripes flood into the country. Each may have a different focus and a different agenda. In a sense, they are competing with each other to help. Their commitment to others is admirable, but to have the greatest impact, these groups need to be coordinated. And that takes trained leadership and a command structure.

In the long term, Japan will recover from this blow to its infrastructure and its economy, but a serious aftershock looms: psychological trauma. I know personally how these memories stay with you. In 1972, I was helping my best friend protect his house during Hurricane Agnes. As rain poured down, floodwaters filled the basement, spilled onto the kitchen floor and swiftly rose in the house. We fled upstairs and escaped through the second-floor window where we were rescued by firefighters in a boat. Others who have worse experiences or have lost loved ones in disasters can suffer lasting mental trauma. Delivering counseling and other services to thousands of people presents a difficult challenge. Our Applied Mental Health Research Group is working to bring evidence-based mental health services to developing countries where such care is all too rare or nonexistent.

During my travels in Australia, and later China and Kuwait, everyone felt an overwhelming sadness and great concern for the Japanese people. The experience emphasized to me that we really are a global village. It also made me appreciate once again the importance of public health and the work of our School. We have some of the world’s top experts in preparedness, refugee assistance, mental health, radiation science and many other disciplines—and they all are dedicated to our mission of saving lives millions at a time.

Every day when I pick up the newspaper, the headlines provide great affirmation of the importance of our work. Public health tackles big problems and that is perhaps never more true than when our global village is tested by disaster.
Global Health Snapshot / Neglected Tropical Diseases

They disfigure, blind, disable, stigmatize and kill an estimated 1 billion people worldwide—the poorest of the poor. Yet neglected tropical diseases (NTDs) have traditionally ranked low on health agendas.

WHO’s first report on 17 NTDs—published in October 2010—rejects the notion of “waiting for the diseases to gradually disappear as countries develop.” Instead, it recommends preventive chemotherapy, intensified case management, vector control, veterinary public health, and safe water, sanitation and hygiene.

Buoyed by new interventions and research, as well as recent support from donors, pharmaceutical companies and NGOs, WHO asserts that control of NTDs is possible and elimination is a feasible goal.

TRACHOMA
A chronic conjunctivitis caused by the bacterium Chlamydia trachomatis and transmitted by contact with infected secretions.

Symptoms: Inflammation under eyelid. Multiple untreated infections can cause scarring, inturmed eyelashes leading to corneal damage and, ultimately, blindness.

Treatment: Community-wide administration of single-dose antibiotics; surgery for inturmed eyelashes

Prevention: Hand- and face-washing; sanitation improvements

Location: Concentrated in Africa

Prevalence: 41 million cases

Trending: Prevalence has fallen sharply since 1985 when 360 million people were infected.

Fact: Women are four times more likely to have blinding trachoma than men (largely because of frequent proximity to children, who are reservoirs of infection).

Target the Community: “Antibiotics, increased water availability and keeping face, hands and clothes clean are really what I see as the approach targets to removing infection in these communities.”

Sheila West has conducted clinical trials on trachoma treatments for the disease in Tanzania, Ethiopia and Niger.

LYMPHATIC FILARIASIS
The disease, which can lead to elephantiasis, is caused by parasitic worms and transmitted by mosquitoes. Adult worms nest in a person’s lymphatic system, producing millions of larvae that circulate in the blood.

Symptoms: Swollen arms, legs or genitals; also damage to kidneys and lymphatic system

Treatment: Swelling of arms and legs can be reduced by rigorous hygiene or reduction surgery.

Prevention: Mass administration of drugs to at-risk populations to reduce parasite burden and interrupt transmission via mosquitoes

Location: Africa, Southeast Asia and South America

Prevalence: 120 million cases in 81 countries

Trending: WHO aims to eliminate it by 2020.

Fact: Over half of infected people have no outward signs of infection.

Secretive Parasites: “[I] study how filarial parasites establish decades-long infections and not generate a reaction that causes them either to be rejected or cause significant pathology.”

Alan Scott focuses on the immunobiology of host-parasite interactions.

LEPROSY
A chronic bacterial infection caused by Mycobacterium leprae and transmitted by droplets from the nose and mouth. The pathogen has an incubation period of about five years.

Symptoms: Mild skin lesions. Untreated, leprosy can cause severe and disfiguring skin lesions and permanent damage to nerves, upper respiratory tract and eyes.

Treatment: Multidrug therapy

Prevention: Early diagnosis and treatment of infected individuals

Location: Mainly Asia and Africa

Prevalence: 211,903 registered cases worldwide (2009)

Trending: New cases dropped 4 percent between 2007 and 2008.

Observation: Some new leprosy cases in China appear to have been transmitted via infected water or soil, not by close contact with leprosy patients—the traditional route.

Early Detection: “Our research focuses on developing a diagnostic test to detect the disease early enough and start treatment before the nerve-damaging lesions occur.”

Ying Zhang, an expert on drug-resistant TB, is conducting leprosy research in southern China, with Huan-Ying Li, MD, MPH, ’52.

LEISHMANIASIS
A spectrum of diseases caused by the protozoan parasites (Leishmania), transmitted by sand flies.

Symptoms: Four types of disease range in severity, from skin sores on exposed areas to lesions that can destroy mucous membranes. In severe form, parasites cause swelling of spleen and liver.

Treatment: Antimony-containing compounds; also used: amphotericin B and fluconazole

Prevention: Bednets

Location: Southeast Asia, Middle East and South America

Prevalence: 12 million people infected worldwide

Trending: 1 to 2 million new cases each year

Fact: Drug-resistant Leishmania strains have been identified; need for new therapies is growing.

Devastating Loss: “As a student, I was struck by the amount of tissue destruction this parasite can cause. Skin breakdown [sometimes] can result in permanent disfigurement.”

Jay Bream focuses on the role of cytokines (soluble proteins) in disease susceptibility.

STEALTHY BUGS
Why do the diseases still exist? One reason is that they lack the attention given high-mortality diseases, says International Health professor William Brieger, DrPH ’92, MPH. “Of course, there are societal costs of disabilities, but they’re not as widely documented as deaths from HIV, TB and malaria,” Brieger explains.

Another reason is that health services are difficult to access in remote areas and urban slums. Surgery is an option in some cases, but medical facilities and health workers are in short supply. Brieger recently returned from Chad, where there are only several hundred doctors serving 11 million people. “And about 20 percent of the health facilities are not functional,” he says. “When a situation is that extreme, how can you deliver the services?”

—Jackie Powder

CHAGAS DISEASE
A life-threatening illness caused by the parasite Trypanosoma cruzi and transmitted by the feces of the blood-sucking triatomine, known as the “kissing bug.”

Symptoms: Fever, headache and muscle pain; also can be asymptomatic in acute phase. In latent phase, parasites hide in heart and other cells, often leading to cardiac arrest and premature death.

Treatment: Benznidazole and nitrofurantoin for acute phase
Prevention: Insecticides (indoor), blood-bank screening, screening of pregnant women and children of infected women
Location: Mainly in Latin America
Prevalence: 10 million people infected
Trending: Decreased from 20 million cases in 1981 to 10 million in 2009
Fact: Of 10 million people infected, 2 to 3 million will die prematurely of heart disease.

Better, Safer Drugs: “At least 60 percent of children with chronic T. cruzi infection can be cured, and treatment of adults decreases progression and mortality. But the drugs have significant toxicity and better, safer drugs are urgently needed.”

Robert Gilman, a tropical disease expert, conducted research in Peru for more than 25 years.

DENGUE
A mosquito-borne viral infection causing a severe, flu-like illness. Multiple infections may lead to the potentially lethal dengue hemorrhagic fever.

Symptoms: Flu-like symptoms; severe form may result in shock caused by leaking blood vessels
Treatment: No specific treatment; supportive care only
Prevention: Insecticides and environmental management; personal protection
Location: Originally concentrated in Southeast Asia, it has spread rapidly to Central and South America over the past 20 years, as well as India, Australia and the Caribbean (most recently, Florida).
Incidence: 50 to 100 million dengue infections worldwide every year
Trending: 30-fold increase in incidence in last 50 years
Fact: Virus comprises four serotypes. After infection with one serotype, an infection by another increases risk of dengue hemorrhagic fever.

A Quadruple Threat: “A vaccine has to protect against all four serotypes. If it doesn’t, you could actually set up a vaccinated population to have more severe disease [later]. That’s not something we see with other human diseases.”

Anna Durbin is collaborating on a clinical trial in Brazil that tests the safety of a tetravalent vaccine against dengue.

BURULI ULCEL
A severe skin disease caused by Mycobacterium ulcerans.

Symptoms: Toxin mycolactone, produced by M. ulcerans, causes large, deep ulcers that can attack muscles and bones. Untreated, it can cause permanent disability.

Treatment: Antibiotics streptomycin and rifampicin; surgery for advanced cases
Prevention: Researchers are working to understand how infection is transmitted and to develop a vaccine.

Location: Mainly in West Africa, including Ivory Coast, Ghana and Benin
Prevalence: Very little accurate information; disease has been reported in 33 countries.
Trending: No clear trend; increase in cases in West Africa in past decade
Fact: Method of transmission is unclear, however, most patients live in marshy areas, indicating that infections may occur in aquatic environments.

A Disease of Development: “I think there is a lot of evidence that development in rural areas [including construction that creates slow-moving water and bad drainage] has a role in the expansion of the disease.”

Jacques Grosset is an international authority on Buruli ulcer and is developing an early diagnostic test and a shorter treatment course.

OTHER NTDs:
• Cysticercosis
• Dracunculiasis (guinea-worm disease)
• Echinococcosis
• Endemic treponematoses
• Foodborne trematode infections
• Human African trypanosomiasis (sleeping sickness)
• Onchocerciasis (river blindness)
• Rabies
• Schistosomiasis
• Soil-transmitted helminthiases (intestinal parasitic worms)

Sources:
Jay Bream, PhD, assistant professor, Molecular Microbiology and Immunology (MMI);
Paul Converse, PhD ’84, MHS ’80, research associate, Johns Hopkins Center for Tuberculosis Research; Anna Durbin, MD, associate professor, International Health; Robert Gilman, MD, professor, International Health; Jacques Grosset, MD, professor, Johns Hopkins Center for Tuberculosis Research; Alan Scott, PhD, professor, MMI;
Sheila West, PhD, PharmD, professor, Epidemiology, El-Maghraby Professor of Preventive Ophthalmology, Wilmer Eye Institute;
Ying Zhang, MD, PhD, professor, MMI
Though she doesn’t take credit for it, Joanna Cohen may have prevented her first tobacco-related death at age 5. As she and her sister climbed on their grandfather who was lying on a couch, they broke one of his ribs. His doctor did a chest x-ray and detected lung cancer. The discovery—and subsequent surgery—helped her grandfather live another three decades. Today, Cohen is taking a more conventional approach to preventing tobacco deaths. She is the new director of the Institute for Global Tobacco Control (IGTC) at the Bloomberg School. Cohen, who previously led research at the University of Toronto’s tobacco research unit, brings a scientist’s zeal for data: “Evidence is key to moving forward in tobacco control, and that’s what our role is.” During a March interview with Johns Hopkins Public Health editor Brian W. Simpson, Cohen touched on global tobacco control trends, smoke-free cigarettes, “nanny-state” accusations and her priorities for IGTC.

**Where are we in terms of tobacco use globally?**

It’s actually not such a pretty picture, and if current trends continue it’s just going to get a lot worse. Right now we estimate about 1.1 billion smokers in the world. The trends are for 1.6 billion by 2025. What’s more, 80 percent of those smokers would be in lower- and middle-income countries.

**Why the surge in developing countries while prevalence is falling in developed countries?**

Good question. The fuel of this pandemic is the tobacco companies. They have realized that the market is not growing in developed countries so they’ve really turned their attention to lower- and middle-income countries. They see them as untapped markets, and they get very excited about those markets.
**Does this dramatic increase in smokers mean the WHO Framework Convention on Tobacco Control (FCTC) is a failure?**

No, definitely not. It just came into force in 2005, and it requires that countries start implementing some of the protocols. They’re built around protecting people from secondhand smoke, helping people quit and preventing people from starting to smoke. We see particular support for the Framework Convention in lower- and middle-income countries because they really want to stop the spread of this scourge.

**How long will it take for the FCTC to have a real impact?**

It really depends on how quickly countries can implement best practice interventions. I just came back from a few days in Vietnam talking about their draft legislation to enact smoke-free public places. They’re also talking about raising taxes on tobacco and putting picture warnings on their cigarette packs. But that’s a country where the government also owns the tobacco company and so there are lots of political pressures to go slowly.

**Since 1965, the U.S. has cut smoking prevalence in half. Are more regulations really necessary?**

It is remarkable what we’ve been able to accomplish in the last 50 years. Who would have thought even 10 years ago that you would be able to go into smoke-free bars? The challenge in front of us is that we still have millions of smokers in this country, and there’s still the pipeline of children turning into adolescents, turning into young adults—that doesn’t stop. So there’s still more things we can do in this country.

**How do you respond to people who say these are “nanny-state” regulations that limit individual choice?**

I think it’s a challenging question and a fair question. I don’t think anyone would like to go into a restaurant and not have public health officials who make sure that raw chicken is kept at cold enough temperatures in the refrigerators or that you have good food-handling practices in restaurants. The government does have a responsibility to protect its citizens. We have pounds of evidence dating back to the 1950s that cigarettes are a toxic and defective product that kills half of long-term users. It’s just unacceptable.

**What are your priorities for the Institute?**

The Institute has a tremendous history. It was led by Jon Samet, who is a giant in tobacco control. As we move forward, we want to provide the evidence base for the most effective and efficient tobacco control policies, programs and activities. Building leadership capacity in countries around the world is also a key focus. Every year, we bring 100 people from lower- and middle-income countries here to Hopkins for a two-week summer institute where they are exposed to some of the best and brightest, and learn leadership skills and the evidence to be able to push tobacco control forward in their countries.

**What’s the Institute’s connection with the Bloomberg Initiative to Reduce Tobacco Use?**

We’re one of five partners in the Bloomberg Initiative; we are really the academic arm of this partnership. And we’re here to generate the evidence, synthesize it and translate it so that other partners can really do what they’re good at, which is advocating for change at the political level.

**What do you think about smoke-free cigarettes?**

These products are new, and it’s unclear actually what level of nicotine someone would get from these cigarettes. Theoretically it might be really helpful in supporting people in quitting. In practice, though, I don’t think we’re there yet.

**Were you ever a smoker?**

I tried smoking (laughs) almost behind the barn sort of thing, but you know those pictures of black lungs just scared me enough that I didn’t want to continue. But my parents smoked when I was growing up. There were still ashtrays in the house. They actually quit in the late ’60s, soon after the Surgeon General’s report. My Dad had an awful night, sort of a smoker’s cough, felt he was going to die and said, “If I wake up in the morning I’m not going to smoke anymore,” and he was able to do that.

**If you could change one thing in the tobacco environment in the U.S., what would it be?**

I’m sorry I can’t answer “one thing” because human behavior is so complex and there’s no silver bullet. You need a physical environment where these products are much harder to get than they are now, that they’re not available 24/7 on every corner. You also need an environment where you don’t see tobacco advertising and promotion wherever you go, and you need an economic environment where these are costly products. And you need a political environment where our leaders can really take this problem seriously and do something good for public health. Tobacco control in particular is an area where we really can save lives millions at a time. We really have the tools at our disposal. We now know what we need to do. We just have to do it.
Ever wonder why the nutritional-content labels for some foods include mention of zinc, copper or manganese—elements forged in the hearts of ancient stars, and best known to us as ingredients in coins and wires and steel? As it turns out, all life—even single-celled bacteria—needs these metals to survive.

“And of course you can’t make them, you’ve got to get them from the environment,” says Valeria Culotta, PhD, a professor and a “metallobiologist” in Biochemistry and Molecular Biology as well as Environmental Health Sciences.

Culotta began research in this field in the late 1980s, and last December was made a fellow of the American Academy for the Advancement of Science (AAAS), in recognition of her pioneering work on the cellular processes that deliver such metals where they are needed.

These processes are crucial because zinc, copper and manganese, as well as their better-known cousin, iron, help cells cope with oxygen—a key player in efficient energy production, but also a highly reactive element that can damage DNA and other cell parts. Certain cellular enzymes can disarm hazardous oxygen-containing molecules, but these enzymes need atoms of metal to do their work. “The antioxidant enzyme is basically inert until it gets its metal,” says Culotta.

But how does such an enzyme get its metal—and precisely the metal it needs? “In a test tube, one of these enzymes will take up such metals indiscriminately; they all look alike to it,” she says. “Yet the enzyme usually will work properly only with a particular metal; the wrong one will kill it.”

Culotta and others have shown that there are specific metallochaperone proteins within cells that grab these metals and deliver them to the appropriate enzymes. Culotta has produced dozens of papers in this field, and is best known for her work in identifying metallochaperones that deliver copper to key antioxidant enzymes known as superoxide dismutases.

“We’ve been doing the very basic biology, using mostly yeast as a model organism, to define the genes and proteins that make up these metal-trafficking pathways,” Culotta says. Yeast is a single-celled organism and therefore relatively easy to study in the lab—and as Culotta and her colleagues have found, the genes involved in metal-trafficking appear to be so important evolutionarily that they are almost always found in similar forms in both lower and higher organisms.

Almost always. And the exceptions could represent an opportunity. “We’re now looking at how these metal-trafficking pathways differ in some disease-causing bacteria and fungi,” she says. “To the extent that they differ, they could be disrupted using drugs, thus killing these pathogens without harming the analogous pathways in humans.”

—Jim Schnabel

Miriam Alexander, MD, MPH ’89, director, General Preventive Medicine Residency, director, Mid-Atlantic Public Health Training Center, assistant professor, Population, Family and Reproductive Health, was named the Association for Prevention, Teaching and Research Outstanding Educator of the Year.

Karen Bandeen-Roche, PhD, the Frank Hurley and Catharine Dorrier Professor and Chair in Biostatistics, was elected president of the International Biometric Society’s Eastern North American Region (ENAR), which is the second largest statistical society in North America. She will serve as president-elect this year, president in 2012, and past president in 2013.

Sara Bennett, PhD, associate professor, International Health, was appointed to the WHO Advisory Committee on Health Research and invited to chair the Wellcome Trust’s African Institutions Initiative Advisory Committee.

Chris Beyrer, MD, MPH ’90, professor, Epidemiology, was appointed to the newly established Scientific Advisory Board of the President’s Emergency Plan for AIDS Relief (PEPFAR). The board will advise the director of the Office of the U.S. Global AIDS Coordinator and the HIV/AIDS research agenda for PEPFAR.

Robert Wm. Blum, MD, PhD, MPH, the William H. Gates Sr. Professor and Chair of Population, Family and Reproductive Health, was the 2010 recipient of the Vince Hutchins Partnership Award, presented by the Maternal and Child Health Bureau, located in Rockville, Md.
as one of four 2010 national recipients of the Celebrating Solutions Award given annually by the Mary Byron Project. Johns Hopkins Center for Injury Research and Policy faculty members Jacquelyn Campbell, PhD, MSN, professor, Johns Hopkins School of Nursing and Health Policy and Management (HPM), and Daniel Webster, ScD ’91, MPH, professor, HPM, developed the LAP along with law enforcement and members of service agencies.

Stephen Gange, PhD, professor and deputy chair, Epidemiology, was appointed for a four-year term as a member of the Department of Health and Human Services’ Panel on Antiretroviral Guidelines for Adults and Adolescents, a working group of the Office of AIDS Research Advisory Council.

Steven Goodman, MD, PhD, professor, Epidemiology, core faculty member, Center for Clinical Trials and the Johns Hopkins Berman Institute of Bioethics, was appointed early this year by the U.S. Government Accountability Office to the 15-member methodology committee of Patient-Centered Outcomes Research Institute (PCORI). Established by the 2010 Patient Protection and Affordable Care Act, PCORI helps to inform patients, clinicians, purchasers and policymakers of best results in health care prevention, diagnosis and treatment.

John Groopman, PhD, the Anna M. Baetjer Professor in Environmental Health and chair of Environmental Health Sciences (EHS), is the 2010 recipient of the American Association for Cancer Research’s Prevent Cancer Foundation Award for Excellence in Cancer Prevention Research. Groopman is honored for his discovery, validation and application of molecular biomarkers to probe the etiology of liver cancer and the means to prevent it in the economically developing world.

David Holtgrave, PhD, chair, Health Behavior and Society, was named in POZ magazine’s 2010 list of the top 100 AIDS fighters, and he also received a Positive Leadership Award from the National Association of People with AIDS.

Thomas Kensler, PhD, professor, EHS, received the Friendship Award of Jiangsu Province, People’s Republic of China, in recognition of cancer prevention and sustained commitment to improving the health of residents of the Qidong area of Jiangsu Province.

Anthony Leung, PhD, assistant professor, Biochemistry and Molecular Biology (BMB), is the recipient of a Department of Defense Idea Award; the award is designed to promote new ideas that are still in the early stages of development and have the potential to yield highly impactful data and new avenues of investigation.

Dan Morhaim, MD, associate, HPM, was re-elected in November 2010 to his fifth four-year term in the Maryland Legislature’s House of Delegates, where he serves as Deputy Majority Leader and is the only physician in the Maryland General Assembly. He is again joined by Shannon Frattaroli, PhD ’99, MPH ’94, assistant professor, HPM, and Keshia Pollack, PhD ’06, MPH, assistant professor, HPM, who have been part-time staff for the past four years.

Larry Moulton, PhD ’87, professor, International Health, was awarded the Statistics Section Award for Academia at the November annual meeting of the APHA.

Daniel Scharfstein, ScD, professor, Biostatistics, was the 2010 recipient of the Distinguished Alum Award given annually by the Department of Biostatistics at the Harvard School of Public Health.

Dory Storms, ScD, MPH, senior associate, International Health, is the winner of the 2010 Carl Taylor Lifetime Achievement Award from the APHA, International Health Section.

Moyses Szklo, MD, DrPH ’74, MPH ’72, professor, Epidemiology, was awarded the Physician’s Merit Medal in the Class of Comendador by the Brazilian president in Brasilia, in December.

Barry Zirkin, PhD, professor, BMB, was named the 2011 recipient of the Distinguished Andrologist Award by the American Society of Andrology, which is given annually to an individual who has made an outstanding contribution to the progress of andrology.

An Award Trifecta

An international expert in the prevention of childhood mortality and illness, Robert Black, MD, MPH, received the 2010 Prince Mahidol Award in the field of public health. The award is presided over by Her Royal Highness Princess Maha Chakri Sirindhorn of Thailand. Black, the chair and Edgar Berman Professor of International Health, was also inducted into UCLA’s inaugural Hall of Fame in February with a Lifetime Achievement Award. And in March he received the Canada Gairdner Global Health Award, which recognizes individuals whose scientific work constitutes a discovery or a highly tangible sustained achievement toward improving our knowledge of and application to global health, especially in the developing world.

Magazine Nominated for Press Award

In April, Johns Hopkins Public Health garnered its second Utne Independent Press Award nomination for science/technology coverage. Utne Reader’s awards “celebrate those independent and alternative periodicals that give readers a fresh take on their world,” says editor David Schimke. Winners will be announced May 18. The magazine also was nominated in 2010.
The Drive to Give

Like many of you, I was saddened and horrified by the earthquake, tsunami and nuclear crisis that rocked Japan this spring.

That disaster was only one of the most recent tragedies that demanded global attention. During my relatively short tenure at the Bloomberg School, the world has suffered several disasters of similar magnitude. The list includes Cyclone Nargis in 2008, China’s Sichuan 2008 earthquake, Haiti’s earthquake in early 2010, Pakistan’s floods in mid-2010, and others.

The disasters may be a world away, but the immediacy of today’s media makes them very close to home. The images, the video and stories reach us in real time and somehow make them feel more personal and more painful.

And like you, when disasters like these strike, one of my first thoughts is, What can I do to help? Human beings may have many failings, but we all have a desire to help those in need. That common empathy drives many people’s commitment to philanthropy. In my 33 years of fundraising work, I have had the privilege of seeing this “better side” of human nature many times. I have witnessed many people share their wealth in order to create a better future for us all.

As associate dean for External Affairs at the Bloomberg School, I was fortunate to work both with generous individuals who wanted to contribute to improving public health as well as with faculty members and students who have dedicated their careers to making that kind of change happen. My proudest moments at the School were the times I was able to bring those positive forces together.

You have probably noticed that I’m writing about my tenure at the School in the past tense. With bittersweet feelings, I have left the Bloomberg School to take a development position in Florida that will allow me to spend more time with my young family.

It was a privilege to work under Mike Klag’s leadership and at the number one school of public health in the world. One of my greatest challenges in working with donors was to communicate what the School does. There are 60 centers and institutes; 10 departments and more than 1,100 full- and part-time faculty. The breadth and scope of the School are phenomenal. To be associated with an institution whose mission is to tackle the hardest problems that afflict humanity was tremendously rewarding and humbling.

I will always carry the School and everything that I learned about public health with me wherever I go. I wish you and the School the very best.

PAUL B. SEIFERT
Former Associate Dean, External Affairs
Johns Hopkins Bloomberg School of Public Health

Letters to the Editor

Amazonian Issue with Malaria Tests
I found the Special Malaria Issue (2011) very thoughtful and successful in calling attention to key issues in malaria prevention and control. However, regarding rapid diagnostic tests (RDTs): They are a great tool, but now we know that some have a lower sensitivity in the Amazon Basin due to a high frequency of HRP-2 gene deletion among P. falciparum strains there. The issue is being addressed by the Amazon Network for the Surveillance of Efficacy of Antimalarial Drugs (RAVREDA). A prospective collection and testing of samples is under way to estimate frequency of HRP-2 deletion. We expect to disseminate results in the following months.

Dr. O. Jaime Chang N.
Amazon Malaria Initiative Coordinator
Office of Health, USAID Peru
Lima, Peru

Malaria in Korea
Kudos on your excellent issue devoted to malaria. One very minor error: Your map “Five Million Years of Malaria” is overly optimistic in declaring the Korean peninsula malaria-free. Areas of South Korea near the demilitarized zone have seen a dramatic reemergence of P. vivax since 1993.

Remington Nevin, MD, MPH ’04
Lake Charles, La.

Praise for Phil Thuma
“Mission Man” [by Mat Edelson] is an excellent article that accurately presents Macha and the incredible ways Dr. Phil Thuma has brought relief from malaria. Both of our children were born at Macha by C-section, and I had no complications, attesting to the quality of the medical care in the middle of the African bush. Now Dr. Thuma has added his malaria triumph. We eagerly await the time when malaria is controlled to such a degree where we live in urban Zambia. This is a wonderful story of hope for all malaria-ridden places, and it rightly honors the man who has given his life to pursuing this goal.

Kathleen Stuebing
Ndola, Zambia

Childhood Memories of Malaria
I enjoyed your special issue on malaria. It reminded me that when I was in high school [in Greece] in the 1940s, many farmers in my country were infected with P. ovale or vivax. They were so well aware of the typical 48-hour tertiary fever that they would retire under a shade and wait for its powerful attack. When it was over, they returned to their fieldwork as if nothing happened.

I was amazed at the ability of the female Anopheles to detect water to lay her eggs. At the time, office employees kept on their desks little pots with wet sponges to wet their fingers when separating papers. The lady mosquito flying well above was able to spot and land on it to deliver her eggs.

Malaria was eradicated in Greece by the early 1950s.

George Dellaportas, MD, DrPH ’70, MPH
North Royalton, Ohio

Intrigued? Irate? Impressed? Send us your comments: editor@jhsph.edu.
In Kenya, brightly colored beads and other jewelry mark a Turkana woman’s wealth and marital status. Many cultures adopt sex-specific dress codes, but biological differences run much deeper. Researchers are now discovering how one’s sex influences physiological responses to flu shots, malaria infection and more. (See page 24.)

Photo: Shehzad Noorani