Message from the President and Board Chair

We are pleased to present PATH’s 2008 annual report. As the following pages show, PATH is making substantial progress in our effort to bring health solutions within reach of those who need them most. Over the past year, we moved forward with innovation, introduction, and integration of health interventions in many of the world’s most resource-challenged settings.

This year’s report centers on the theme of solutions, illustrating how our programs work to translate the world’s knowledge, skill, and capacity into solutions that truly meet the needs of the communities we serve. This focus allows us to advance essential, lifesaving solutions, from vaccines that protect the world’s most vulnerable populations to interventions that save the lives of mothers and their young children.

In 2008 our organization continued to grow to meet global health needs. Over the year, we added more than 250 new staff members, bringing our total staff to almost 800 worldwide. Donor funding also increased substantially. Our growing human and financial resources are bringing more opportunity—and responsibility—to lead efforts to improve global health in the years ahead.

We are grateful for your interest and support. Especially in times of economic hardship, we value our opportunity to contribute to the common good. Thank you for being part of this great endeavor to bring innovative health solutions to the least fortunate among us.

Sincerely,

Christopher J. Elias, MD, MPH  
President and CEO

Vera Cordeiro, MD  
Chair, Board of Directors
What does it take to transform vision into solutions?
A scientist with a vision of a vaccine once thought impossible, a mother who dreams of a healthy life for her child. Bringing to life their vision of a healthier world involves solutions both large and small, from a cross-cutting global partnership to a grain of rice fortified with essential nutrients.

At PATH, we’re committed to solutions that are tailor-made for the people who will use them, from health workers in India’s slums to families in remote villages in Cambodia, Peru, or Zambia. We start with innovation—taking an old idea and making it new, or bringing a new idea into being. We help solutions take shape, under microscopes and across communities, crafting practical and effective responses to global health challenges. And we build collaborations that allow the most successful ideas to spread across countries and continents.

With inspiration and shared purpose, we’re transforming individual visions into solutions every day. And we’re working toward our collective vision: a world where health is within reach for all.
Exploring promising technologies

At the core of our work in health technologies is PATH’s health innovation portfolio, a collection of ideas being tested for their potential to solve unmet global health needs. Some ideas become projects, and some of those projects grow into solutions—like a new way to protect temperature-sensitive vaccines or a needle-free injector (pg. 14).

At this early stage, our work is framed in questions. In 2008, among many other questions, our scientists and technical experts asked:

• Can the latest in industrial-world battery technology extend the life of solar-powered refrigerators used to store vaccines in regions where electricity is unreliable at best?
• What is the technical feasibility of two promising approaches for diagnosing HIV in infants, in whom AIDS progresses with fatal rapidity if not treated within weeks after birth?
• Could radio-frequency tags be used to ensure that tuberculosis patients continue to take their medicine?

PATH has a well-established process of assessing these product concepts and identifying solutions with the best chance of success—ideas that are technologically strong, potentially marketable, and likely to be acceptable to health systems in these demanding environments. Our screening approach helps us quickly eliminate ideas that are unlikely to deliver on their promise—and identify others we can advance through testing, development, commercialization and, ultimately, widespread use.

Innovation funding—the flexible support primarily provided by individuals—supported the early research that will tell us which of these solutions to pursue. Look for this symbol or see page 24 to learn more about the impact of innovation funding.
Communities around the world lack reliable access to safe water. PATH is exploring ways to bring effective water-treatment products within reach of the poorest homes and communities.

In Kenya, we investigated the potential of small community treatment systems. In Korogocho, a Nairobi slum, we tested a device that kills dangerous microbes and requires only salt, electricity, and water. Korogocho’s citizens used it to produce clean water for themselves and their neighbors, which provided them with a small income. In the months ahead, PATH will use this experience to test further refinements of the device in communities around the world.

Learning how to make water safe

In crowded slums and vast rural areas, sewage and pollutants quickly find their way into the water used for drinking, cooking, and washing. Extremely poor areas often lack reliable public treatment systems that keep water clean. Yet many people do not treat their water, and those who do often use traditional methods, such as sari cloths, to remove silt and worms. These methods are ineffective against the contaminants that pose a daily risk of disease.

PATH and our partners are exploring ways to increase access to safe water in homes, beginning in Cambodia, India, and Vietnam. In 2008, we completed research that will help us put safe water within reach of the poorest communities. What we learned about how families think and act is the basis for testing solutions—improved products, promotion, and distribution—now planned for 2009 and beyond.

Expanded frontiers for the Uniject® device

Expectant mothers around the world face the risk of severe bleeding after childbirth. A dose of the drug oxytocin can help prevent this complication, which is the leading cause of maternal deaths worldwide.

Last year PATH and our partner in the pharmaceutical industry reached a significant milestone in delivering oxytocin to women through the Uniject device, a prefilled, autodisable injection device we pioneered years ago. In 2008, drug authorities in Argentina were the first in the world to grant regulatory approval for making oxytocin in the Uniject device commercially available. This exciting combination of a lifesaving drug delivered in a simple device means even unskilled health workers attending rural home births can administer a preventive dose of oxytocin and make a significant, measurable impact on maternal health.

PATH and our collaborators are also closer to introducing the Uniject device with a new subcutaneous formulation of Depo-Provera®, an injectable contraceptive, and with gentamicin, an antibiotic used to treat severe bacterial infections in newborns. These two approaches would extend the reach of both drugs beyond the clinic to rural communities and patients who can’t always access health facilities.
Discovering new vaccine approaches

Vaccines could save millions of lives during an influenza pandemic. But in a pandemic, we will need to rapidly and efficiently produce vaccines that are tailored to an unpredictable virus—difficult even in countries with ample resources. PATH is working on cutting-edge technologies for influenza vaccines, focusing on novel technologies that could be used in the developing world.

Right now, most influenza vaccines are produced in hen eggs, yielding at best only a few doses of vaccine per egg. It’s an impractical technique for a pandemic that requires mass vaccination ahead of a quick-moving virus. As a first step to getting around those constraints, we surveyed new vaccines that rely on cells, eggs, or recombinant technologies using proteins and virus-like particles.

After identifying those with the most promise and assessing advantages and disadvantages, we will select four to six candidates for further development. Over the next few years, we will build partnerships and work with manufacturers to ensure these new vaccines address the unique needs of developing countries. Our goal is to develop vaccines that can be manufactured easily, quickly, and affordably—within the developing world. We’re making use of market forces already in motion, looking first at solutions meant for well-resourced countries, and providing a compelling argument and the necessary tools to make those solutions effective for people everywhere.

By making oxytocin available in the Uniject device, PATH and our partners are reducing health risks for women who give birth in rural settings.
PATH is integrating nutrition, community health, and antenatal care efforts to provide pregnant women and very young children with orange-fleshed sweet potatoes, a rich source of vitamin A.

That’s where the orange-fleshed sweet potato comes in. PATH is researching whether an integrated program that provides pregnant women with sweet potato seedlings through community health and antenatal care services can reverse the course of vitamin A deficiency—and support healthy growth in children while strengthening defenses against infectious disease, especially diarrhea.

There’s strong evidence that orange-fleshed sweet potatoes—which are rich in vitamin A and easy to grow—can indeed help, boosting energy and reducing malnutrition at the same time. The impact could be highest in the poorest households—where most food is grown, not bought, and where the pressure on food supplies is great.

Before PATH can design, implement, and evaluate a program like this in the field, we have many questions to answer for communities, collaborators, and funders. In 2008, we compiled a rich base of information and began initial outreach: reaching across sectors to find partners addressing global and national agriculture needs, setting up a process for selecting pilot communities, and engaging local leaders. The results of this work and any further exploration will support decisions about orange-fleshed sweet potatoes—and global understanding of how agriculture and public health intersect.

Investigating the link between health and agriculture

In rural Africa, families face tough decisions every day, including choices between enough food and the right kind of food. It can be hard to meet even basic nutritional standards, such as adequate vitamin A—especially among vulnerable groups like pregnant women and very young children.

“Diarrhea is still here—but it is no longer killing.”
Women rarely hold office in Kenya. Florence Weke-sa is an exception. The only female councilor on the Kimilili Municipal Council, she has become a voice for the mothers of her ward and for their children. Wrapped in her customary bright colors, Florence stands out in a crowd—and so does her message: “We need to care for our children.”

The statistics say diarrhea kills 5,000 children around the world every day. In Kenya, diarrhea is the third leading cause of death among children under five. The burden is particularly serious in Bungoma district, a poor and mostly rural area. It is Florence’s duty as a councilor to be present at every funeral in the district. Too often, those funerals are direct evidence of how quickly and how often diarrhea kills the very young.

Their message affected Florence as a leader and a mother: she vividly remembers a long week almost 20 years ago spent nursing her son through a nearly fatal episode. She speaks eloquently about the need to help women control diarrheal disease: “I tell women that they are equally important, something they have never known.”

Last year, Florence took part in a pilot project run by PATH, joining a workshop that taught practical methods to reduce disease: breastfeeding, use of oral rehydration solution, zinc treatment, proper hygiene. The workshop was part of a new, community-based approach to diarrheal disease control in the region and a proving ground for techniques that will be integrated into Kenya’s National Diarrheal Disease Control Framework. The model will soon be translated to Vietnam as well.

Learning how to respond when diarrhea breaks out in a village—how to slow its spread from household to household, how to keep children hydrated, the importance of clean water—gave her a fresh set of tools. For Florence, who believes a councilor’s job is to lead by example, “The seminar opened up so much.”

Armed with information, she can provide immediate aid to families who come to her because a child is violently ill. And she travels every week to churches, schools, and health clinics, spreading awareness among parents and community leaders. She’s creating a safety net for her community’s children. Now, she says, “Diarrhea is still here—but it is no longer killing.”
Preventing mother-to-child transmission of HIV

Throughout South Africa’s Eastern Cape Province, communities struggle with a legacy of oppression and the health burdens it brings. An estimated 28 percent of pregnant women in the region are living with HIV and face the risk of passing the virus on to their children. To reach these women with interventions that will keep both them and their children healthy, PATH is working with local partners and the local department of health to integrate prevention of mother-to-child transmission (PMTCT) of HIV into the continuum of antenatal, maternal, and pediatric care.

The integrated approach is strengthening the province’s ability to provide high-quality, comprehensive PMTCT services to women wherever they seek care. It is also improving the quality and availability of health data, boosting human resource capacity, and supporting government policies that expand women’s access to antiretroviral drugs and other important interventions.

In clinics and health centers, health providers are strengthening their counseling skills and maximizing every opportunity to link women to reproductive health care as well as HIV and AIDS treatment, care, and support. In communities, women and their families are discussing the urgency of seeking preventive care and treatment. With each effort, the integrated approach is helping to mitigate the impact of HIV and giving women the greatest chance to protect themselves, and their babies, from HIV.

Innovation funding—the flexible support primarily provided by individuals—allowed us to establish a project base ahead of the curve and enhance services for HIV-positive mothers and their babies in South Africa. Look for this symbol or see page 24 to learn more about the impact of innovation funding.
Protecting vaccines from cold
When outside temperatures soar, health officials work hard to keep vaccines cool during transport and storage. But sometimes these vital vaccines become too cool, suffering freeze damage that can affect their potency and diminish their ability to protect children from debilitating illnesses. Multicountry studies have verified that accidental freezing of vaccine occurs at alarming rates throughout the developed and developing worlds.

To solve this problem, PATH scientists turned to additives that protect foods, consumer products, and medicines from freeze damage. They soon discovered a way to incorporate the additives into vaccine formulations and protect common vaccines from the effects of accidental freezing.

In 2008, PATH placed the freeze-stabilization technology in the public domain, allowing vaccine manufacturers worldwide to access the approach. The technology has since been transferred to vaccine producers for use in two childhood vaccines. Adding only a fraction of a penny per dose, the breakthrough will allow them to protect vaccines that are vital to children’s health.

Jet injectors may help meet the need for needle-free injection approaches that are affordable and safe.

Safer, more effective injections
About half of injections in the developing world are provided with unsterilized or reused needles. Initially intended to prevent or treat illnesses, these needles often place people at risk of infection. Needles also create a medical-waste challenge, especially in areas with limited resources. There is a clear need for needle-free injection alternatives that are affordable and safe.

To meet this need, PATH is working with several partners to advance “jet injectors” that use a high-pressure stream to penetrate the skin—no needle required. In 2008, we conducted jet-injector assessments with healthcare workers in Brazil and India and found that workers were interested in the technology’s potential and eager to offer valuable feedback.

We also explored intradermal delivery options, because some vaccines, when administered directly under the skin, may actually be protective at far smaller doses than currently used—possibly allowing vaccines in short supply to be spread further. We studied jet injectors’ effectiveness for rabies vaccine, supported trials to vaccinate infants and toddlers against influenza and polio, and collaborated with developers to plan for international regulatory approval. These efforts are paving the way for jet injectors’ inclusion in developing-country health programs and reduced use of contaminated syringes.
Geeta, 34, is a sex worker in India. Like so many women in the sex trade, she started the work out of necessity, as a way to survive after her husband left her with two small children and no income. And like many of her colleagues, her job puts her at risk of being infected by HIV.

At first the illness was a mystery to Geeta, something that struck other sex workers with no apparent cause. She watched one friend grow weak, stop eating, and seemingly waste away, leaving behind small children when she died. Geeta was terrified. She didn’t know what caused the illness or how to stop it. The threat seemed overwhelming, and its destruction continued. She saw at least 30 other women die from the disease and twice that many become ill.

Geeta felt enormous relief when, while training to become a peer educator with a local HIV intervention, she learned how to protect herself and her friends from HIV. Later, when she joined PATH as a key population consultant, she reached out to other sex workers, helping them find ways to protect themselves.

Through PATH’s InterAct and Convergence projects, Geeta now provides safe gathering places for sex workers inside anonymous buildings, away from the stigmas and pressures of everyday life. Using interpersonal communication and interactive theater, Geeta and other health advocates are helping women work through solutions to common problems—violence, coercion, discrimination—and find support for their situations and evaluate their choices.

Geeta’s work with PATH is saving lives and empowering women. “No one can think positively about their decisions and their lives if they’re just told what to do,” Geeta says. “But with PATH, we help our peers in thinking about the consequences of our choices and feeling worthy of taking more control of our future. And that can make all the difference.”
Integration of Ultra Rice® fortified grains into lunch programs in India may soon provide poor children with half of their recommended daily iron allowance—and a greater chance for healthy development.

Improved nutrition for Indian children

Many children in India arrive at school every morning with their bellies empty, yesterday’s dinner likely the last meal they consumed. Public-sector meal programs often provide these students with the most substantial food they will eat all day. Even so, their diets lack important nutrients that their bodies need to develop.

For years, PATH has worked with partners to pack an added boost of vitamins and minerals into school lunches using PATH-developed Ultra Rice grains. These rice-shaped grains, made from fortified rice flour and stabilizing ingredients, hold big potential for improving children’s nutrition and development.

Efficacy trials in Latin America and Asia have demonstrated the health impact of Ultra Rice in multiple locations—particularly India—where rice is a staple food.

In 2008, PATH collaborated with a local manufacturer in India to produce Ultra Rice and establish a robust supply. We also began studying approaches to keeping costs low and preserving the grains’ micronutrient content under different scenarios of preparation, transport, and storage. We will soon present our findings to state-level decision-makers to encourage integration of Ultra Rice into midday meal programs throughout India—potentially providing poor children with half of their recommended daily iron allowance and a greater chance for healthy development.

Ultra Rice is a registered trademark in the United States of Bon Dente International, Inc.

Using pharmacies to halt epidemics

In many developing countries, the neighborhood pharmacy is often the first—and sometimes only—stop for people seeking health services. Yet pharmacists are not always equipped to provide clients with information about serious illnesses such as HIV/AIDS or tuberculosis (TB).

Recognizing pharmacists’ front-line role, PATH is collaborating with pharmacies and physicians in Cambodia, Ukraine, and Vietnam to direct clients toward appropriate treatment and support services.

In Vietnam and Cambodia, which shoulder high burdens of TB and face an emerging TB–HIV epidemic, PATH is working with pharmacy staff to strengthen interpersonal skills and knowledge about client referrals and testing. We also are collaborating with private physicians—key health care providers in urban areas—to strengthen their role in expanding community access to high-quality HIV and TB services. In 2008, PATH trained 250 pharmacists and pharmacy staff in three urban districts in Vietnam and implemented a referral system now used by more than half of pharmacies in these districts. In Cambodia, PATH worked with the National Tuberculosis Program to establish links between private-sector pharmacies and formal TB treatment services. To fuel these new approaches, PATH conducted advocacy, communication, and social mobilization workshops with representatives of several Asian countries, who in turn are encouraging their country governments to support TB control.
PATH is helping pharmacists in Cambodia, Ukraine, and Vietnam direct clients to treatment and support services.

In Ukraine, PATH used a similar model to address a rapidly growing HIV epidemic. We trained pharmacists in three cities to provide effective counseling, information, and services to high-risk clients such as injection-drug users and sex workers. Twenty-two pharmacies distributed more than 500,000 informational materials with HIV and sexually transmitted infection (STI) prevention messages. The project also established a referral system to AIDS centers, STI clinics, and service organizations. These activities have built support for people at high risk of HIV and increased use of health and social services.
Protecting girls and women from cervical cancer

Women don’t have to die of cervical cancer, but many do—particularly in the developing world, where an estimated 85 percent of the world’s 250,000 cervical cancer deaths take place. New vaccines are now available to protect girls and women from human papillomavirus (HPV), the primary cause of cervical cancer, and PATH is laying the groundwork for international support and successful introduction of these vaccines into developing countries.

In India, Peru, Uganda, and Vietnam, our demonstration projects are exploring strategies that can achieve high coverage for vaccinating girls 9 to 14 years old against HPV. The projects are looking at social and cultural concerns, vaccine acceptability, the realities of existing health systems, and the costs of each approach. In 2008, nearly 9,000 girls were vaccinated in more than 700 schools in Peru, and vaccinations began in Uganda. Research is well under way in Vietnam and will soon begin in India.

Early results are highly encouraging, as communities, health providers, and decision-makers are supportive of the vaccine and recognize its need. As the project progresses, we anticipate that our research will help country governments and international agencies prioritize funding for and introduction of HPV vaccines throughout the developing world, protecting countless women and their families from cervical cancer.

Innovation funding—the flexible support primarily provided by individuals—helped us tell communities in India and Peru about cervical cancer and a new vaccine that can protect young women against the disease.

Look for this symbol or see page 24 to learn more about the impact of innovation funding.
More clearly than ever, we know that the opportunity to protect millions of children from malaria is within reach.

**Breakthroughs in malaria vaccines**

New trial results show more clearly than ever that the opportunity to protect millions of children from malaria is within reach. In 2008, a trial supported by the PATH Malaria Vaccine Initiative (MVI) indicated that GlaxoSmithKline Biologicals’ RTS.S—the world’s most clinically advanced malaria vaccine candidate—provides both infants and young children with significant protection, including 53 percent efficacy against clinical disease. A second trial confirmed the vaccine’s compatibility with immunization programs in the region.

With almost one million people, most younger than five years, dying from malaria each year, MVI is working hard to accelerate the most promising vaccines, including RTS.S. In addition to evaluating leading vaccine candidates, MVI weeded out several that no longer seem viable, an essential step for narrowing the pipeline of vaccine candidates.

MVI is also working to ensure that the successful vaccine can be used as soon as it is approved. Thirty countries adopted a framework developed by MVI that will help policymakers make decisions on malaria vaccine use, once approved. And MVI publicly launched its Malaria Vaccine Advocacy Fellowship program to train malaria researchers from several countries as “policy champions” who can advocate for critical support that will bring a successful vaccine directly to the children who need it.

**Documented progress in malaria control**

Every day in communities throughout Zambia, more families are being protected from mosquitoes and the potentially deadly malaria parasite they transmit. Since 2005, the Malaria Control and Evaluation Partnership in Africa (MACEPA), a program at PATH, has supported the Government of Zambia’s leadership in controlling malaria.

**Skills for life**

In a poor urban community in Nicaragua, an inspiring young man named Enyel leads a discussion with his peers about relationships and violence. He is just 13 years old, but Enyel (pronounced “Angel”) seems wise beyond his years. His friends, assembled in the dirt courtyard of his modest house, are goofy and giggly. But Enyel is serious and poised. He speaks with calm understanding about sex, peer pressure, and puberty. Enyel is set on shaping boys’ attitudes today and helping them become responsible young men.
In 2008, results of Zambia’s national malaria indicator survey showed significant progress in making bednets, medicines, and indoor spraying broadly available. Among children younger than five years, malaria parasite prevalence rates dropped by more than half, and cases of moderate to severe anemia, a common consequence of malaria, decreased by more than two-thirds. More than 60 percent of households owned an insecticide-treated bednet—an increase of nearly 65 percent from 2006—and bednet usage increased among young children and pregnant women. In addition, more pregnant women were receiving preventive medicine.

Building on Zambia’s demonstration of what can be achieved through an ambitious national plan and program, the MACEPA Learning Community is working with other African countries to implement their malaria control plans. In 2008, the Learning Community supported training workshops for representatives of more than a dozen neighboring nations to strengthen their skill and capacity to fight malaria. Illustrating the impact of these and related efforts, Ethiopia’s national malaria indicator survey determined that nearly 70 percent of households in the country’s most malaria-ridden areas were protected by at least one insecticide-treated bednet or indoor spraying in 2008.

Enyel is part of a project called Entre Amigos (“Between Friends”). Entre Amigos operates in Ciudad Sandino, an extremely poor community with the highest crime rate in Managua. PATH and our partners are reaching young people 10 to 14 years old through their peers, like Enyel, to change attitudes about violence, sexuality, and gender roles by promoting respectful relations. Each month, these young leaders walk through their dusty neighborhoods and round up other girls and boys who are part of the project. They gather in somebody’s yard and talk about important topics they won’t study in school. Why do boys participate in this group? Is there a difference between having a relationship and having sex? What are the changes that are happening to my body?

Enyel joined Entre Amigos one year ago and says it changed the way he thinks. He understands his body better, he is more aware of violence and abuse in his community, and he makes an effort to help his mother around the house. He sees change among his peers, too. “I feel good and also very proud that I can help,” he says.

Enyel has big goals for his community and for himself. “I want to be a lawyer,” he explains, “because I’d like to defend the rights of children.” Already, his work is a beacon for the hopes and futures of the young people in his neighborhood.
Tackling Kenya’s health challenges

Transmitted across the airwaves in Kenya’s Western Province, WEST FM radio reaches 2.5 million people with messages about HIV/AIDS, gender-based violence, and other health topics. This information is essential to listeners facing the challenges of HIV, tuberculosis, malaria, family planning, and maternal and child health risks—especially because services aren’t reliably reaching the women, men, and children who need them.

WEST FM is just one component of a multifaceted effort to expand health services and increase communities’ awareness of their options for improving their own health. PATH’s creative approach boosts community knowledge about health services and healthy behaviors through radio broadcasts, community theater, health fairs, workplace visits, and events geared to hard-to-reach groups, such as married adolescents. We also strengthen facility-based services for a range of health issues and offer support for individuals and families affected by HIV/AIDS.

The program has had an immense reach. In 2008, PATH and our partners extended HIV counseling and testing to 146,000 individuals, reached more than 100,000 pregnant women with services to prevent transmitting HIV to their children, and trained more than 500 health workers to counsel and test HIV patients. We offered support groups to 45,000 adults and children living with HIV/AIDS and provided financial, educational, and health assistance to 35,000 children orphaned or left vulnerable by HIV. With each step, the project has helped Kenyans find ways to protect and improve their health.

In Kenya, PATH and our partners assisted 35,000 children orphaned or left vulnerable by AIDS.

Expanding access to children’s vaccines in Asia

Japanese encephalitis (JE) is virtually unheard of in the Western world, but the disease kills or disables thousands of people in poor rural communities in Southeast Asia and the Western Pacific each year. PATH is helping JE-endemic countries understand the disease and introduce an affordable, lifesaving vaccine to protect against it. We have partnered with Chengdu Institute of Biological Products in China to increase access to a long-successful vaccine already in use in China at an affordable price for developing countries. Countries that previously couldn’t afford JE immunization programs will now be able to consider introducing the vaccine.

In 2008, PATH and the Chengdu Institute advanced construction of a new manufacturing facility to meet the growing regional need for a JE vaccine produced to international quality standards. The institute exported more than 31 million doses of the vaccine over the course of the year.

PATH also provided technical assistance to countries that already have or will soon launch JE vaccination programs. In Cambodia, PATH supported the government in its plans to bring critical protection to thousands of children, preparing for vaccine introduction in 2009. In Vietnam, where children in high-risk areas have been vaccinated for more than ten years, PATH helped the government establish a surveillance model to track the disease and prepare for expanding immunization to the entire country.
In a small, rural village in Lesotho, Mamorena Namane, 30, proudly shows off her big baby boy outside her modest three-room house. With his chubby legs and broad cheeks, the baby—her second child—is a picture of health. And Mamorena knows why: she has faithfully breastfed the child since he was born.

But health didn’t come easily to her first child. At the urging of her husband’s parents, Mamorena fed the baby only water for the first week of his life until his umbilical cord fell off, a common cultural practice. Eventually she added breastmilk and soft porridge to his diet, which made the infant ill and susceptible to life-threatening infections.

It’s a common tale throughout Lesotho, where mothers frequently delay breastfeeding and nearly half of infants receive liquid and solid foods prematurely. A diet of food other than breastmilk can put babies at risk of illness, stunted growth, and death. A mother’s milk provides infants with the critical nutrients, antibodies, and fluids they need to stay healthy; international recommendations advise beginning breastfeeding in the first hour after a baby’s birth.

Through the Infant and Young Child Nutrition Project, PATH and our partners are boosting awareness among families and communities in Lesotho about healthy and safe feeding practices for young children. Because malnutrition contributes to more than a third of child deaths in poor countries, we focus on improving nutrition during the critical period from a mother’s pregnancy until her child is two years old. We train community health workers to support mothers in optimal and safe feeding practices, and mothers learn how to keep their young children healthy and well nourished.

Mamorena learned about breastfeeding’s value when, inspired by her mother, she trained as a community health worker while pregnant with her second child. The project’s training showed her how to support mothers in her community on good breastfeeding practices. She shared the information with her family, and when Mamorena and her husband welcomed their second son, her in-laws encouraged her to start breastfeeding immediately.

Now, Mamorena describes how strong and healthy her younger boy is and how her entire family has supported optimal feeding practices for her baby. She shares what she learned with people throughout her village to help other new mothers overcome cultural barriers to early and exclusive breastfeeding—and to be sure every baby has a chance to grow up healthy and strong.
Innovation funding

Solutions rely on people

The individuals and families who contribute to PATH are a very real part of our work—transforming ideas into solutions through their gifts. Individual donors are one of our most important sources of innovation funding, the flexible support that allows us to pursue groundbreaking ideas and respond to emerging needs.

Last year, gifts from individual donors brought nearly $2.8 million in innovation funding, including $2,064,133 for PATH’s Catalyst Fund and $725,100 for our Fund for Health Technologies. These contributions provide our base of innovation funding.

Use of innovation funds

The “innovation funding” icon used throughout this report highlights the impact that flexible funds have had on PATH’s ability to advance many of our most significant achievements. In 2008, innovation funding supported 54 activities with the potential to improve health around the world.

Supporting new initiatives

PATH uses innovation funding to support new initiatives and push early successes forward. These promising ideas are too early in their development to attract foundation grants but have the potential to significantly contribute to our global health objectives.

In 2008, innovation funding made possible 42 activities in support of new initiatives. Among many other activities, we used these funds to support information resources for health workers on maternal health, neonatal technologies, and infant feeding; new models for vaccine delivery; and training for health workers in Vietnam. Projects reached across the spectrum of PATH’s work: emerging and epidemic diseases, health technologies, maternal and child health, reproductive health, and vaccines and immunization.

Our sincere thanks go out to all of our supporters.
Leveraging major grants
We also use innovation funding to leverage foundation and government grants that can take successful projects to global scale, exponentially increasing the impact of individual gifts.

Last year, we used innovation funding to leverage five major grants. For example, we applied $10,000 to improve children’s health through better nutrition and feeding practices in the critical first years of life. This commitment from our donors was matched by $100,000 from the United Nations Children’s Fund, allowing us to set up a program in Kenya through which health workers and hospitals become the first line of defense for child health, counseling new mothers on how to properly feed and care for their babies. Similarly, we used innovation funding to support grants focused on child immunization, HIV/AIDS, and the role of pharmacies in improving access to health services.

Meeting strategic priorities
Innovation funding allows us to be pioneers in the effort to improve health around the world. With these funds, we hire world-class experts ahead of the curve, set strategies for maximum impact, and keep effective programs going between funding opportunities. In 2008, these resources allowed us to focus on training for new staff and for our organization’s leaders, increasing our ability to make a difference in the lives of the people they serve.

Our sincere thanks go out to all of our supporters who helped make these and many other solutions possible.

Our commitment to sound financial stewardship
We are committed to maintaining the highest stewardship of donor funds. PATH has received the highest possible rating for sound fiscal management from Charity Navigator for five years running, an honor accorded to fewer than 4 percent of rated charities. Last year, more than 86 percent of donor dollars went directly to our programs in the field.

The confidence and trust of our donors are extremely important to us—now more than ever, as the global economic crisis puts pressure on nonprofit groups and the people who support them. We pledge to continue searching for ways to achieve even greater impact in return for this support.
2008 financial summary

Message from the Board Treasurer

During a trip to Vietnam in October, I saw firsthand how PATH is using financial support from donors to create sustainable health solutions for people around the world. At a village health center in Chau Thanh, for example, I witnessed the heartwarming results of PATH’s innovative work to increase immunization rates among small children.

PATH is weathering the current economic storm well. The pipeline of funding for the next several years has increased, and fully funded program spending was up 25 percent in 2008. Principal donors such as the US Government and the Bill & Melinda Gates Foundation have kept funding at or above historic levels, and administrative costs have remained within management’s pre-set limits and actually decreased as a proportion of total expenditures.

PATH also stayed on track in efforts to expand innovation funding—flexible funds that make it possible for PATH to move quickly on new ideas. Fundraising from individuals increased in 2008 as a reflection of donors’ growing commitment to PATH’s mission.

The bulk of PATH’s funds have been kept safe in conservative, short-term investments. Although the investment earnings are half of what they would be during typical economic times, the cash advanced by program funders is intact. Conversely, PATH’s $6 million endowment, which is invested partially in equities, saw a downturn of $1.8 million. We expect the endowment to rebuild as the markets return to normal over time.

Thanks to solid management and unwavering support from a diverse set of committed donors, our work to create and implement innovative health solutions continued unabated during 2008. We appreciate our donors’ willingness to stay the course on this very important journey.

Dean Allen
Treasurer, Board of Directors
Chair, Development Committee
2008 financial summary (audited)

Revenues (in thousands)

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<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations</td>
<td>$113,211</td>
</tr>
<tr>
<td>US Government</td>
<td>40,321</td>
</tr>
<tr>
<td>Other governments, nongovernmental</td>
<td>21,547</td>
</tr>
<tr>
<td>organizations (NGOs), multilaterals</td>
<td></td>
</tr>
<tr>
<td>Individuals/other</td>
<td>11,135</td>
</tr>
<tr>
<td>Investments</td>
<td>1,161</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td><strong>$187,375</strong></td>
</tr>
</tbody>
</table>

Expenses (in thousands)

**Program services**

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging and epidemic diseases</td>
<td>$22,351</td>
</tr>
<tr>
<td>Health technologies</td>
<td>10,095</td>
</tr>
<tr>
<td>Maternal and child health and nutrition</td>
<td>7,928</td>
</tr>
<tr>
<td>Reproductive health</td>
<td>16,081</td>
</tr>
<tr>
<td>Vaccines and immunization</td>
<td>27,305</td>
</tr>
<tr>
<td>Cross-program</td>
<td>125</td>
</tr>
<tr>
<td><strong>Subtotal programs</strong></td>
<td>83,885</td>
</tr>
<tr>
<td>Program subawards</td>
<td>79,771</td>
</tr>
<tr>
<td><strong>Subtotal program services</strong></td>
<td>163,656</td>
</tr>
</tbody>
</table>

**Support services**

<table>
<thead>
<tr>
<th>Service</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management and general</td>
<td>21,744</td>
</tr>
<tr>
<td>Bid and proposal</td>
<td>2,474</td>
</tr>
<tr>
<td>Fundraising</td>
<td>1,311</td>
</tr>
<tr>
<td><strong>Subtotal support services</strong></td>
<td>25,529</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td><strong>$189,185</strong></td>
</tr>
</tbody>
</table>

Assets and liabilities

**Assets** (in thousands)

<table>
<thead>
<tr>
<th>Asset</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants receivable</td>
<td>$453,235</td>
</tr>
<tr>
<td>Invested grant funds</td>
<td>251,542</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>72,367</td>
</tr>
<tr>
<td>Other</td>
<td>9,010</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$786,154</strong></td>
</tr>
</tbody>
</table>

**Net assets and liabilities** (in thousands)

<table>
<thead>
<tr>
<th>Net assets</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant funds temporarily restricted</td>
<td>$753,225</td>
</tr>
<tr>
<td>Unrestricted assets</td>
<td>13,382</td>
</tr>
<tr>
<td>Permanently restricted assets</td>
<td>3,363</td>
</tr>
<tr>
<td><strong>Total net assets</strong></td>
<td><strong>$769,970</strong></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>16,184</td>
</tr>
<tr>
<td><strong>Total net assets and liabilities</strong></td>
<td><strong>$786,154</strong></td>
</tr>
</tbody>
</table>

Sources of revenue

- 60.5% Foundations and corporations
- 21.5% US Government
- 11.5% Other governments, NGOs, multilaterals
- 5.9% Individuals/other
- 0.6% Investments

Expense allocation

- 86.5% Program services
- 11.3% Management and general
- 1.3% Bid and proposal
- 0.9% Fundraising

Use of funds

- 26.6% Emerging and epidemic diseases
- 12.0% Health technologies
- 9.5% Maternal and child health and nutrition
- 19.2% Reproductive health
- 32.7% Vaccines and immunization

Figures are presented in US dollars.

Notes: The above financial summary is an excerpt from PATH’s audited financial statements, which are audited by the firm Clark Nuber. Full copies are available on our website at www.path.org.

PATH is an international, nonprofit, nongovernmental organization. Our mission is to improve the health of people around the world by advancing technologies, strengthening systems, and encouraging healthy behaviors. Contributions to PATH are tax-exempt under US IRS code 501(c)(3).
Board of directors

PATH’s board members are public health and business leaders from the countries we serve, Europe, and the United States. The board provides governance and fiduciary oversight, sets policy, and assesses PATH’s overall performance.

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Chair
Brazil
Founder and CEO
Associação Saúde Criança Renascer
Rio de Janeiro, Brazil

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United States
Senior Advisor, Social Sector Office
McKinsey & Company
Seattle, WA, United States

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Vice Chair
United States
CEO
The Health Technology Center
San Francisco, CA, United States

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Nigeria
Executive Director
African Population and Health Research Center
Nairobi, Kenya

Jay Satia, PhD
Secretary
India
Former Executive Director
International Council on Management of Population Programmes
Selangor, Malaysia

George Gotsadze, MD, PhD
Georgia
Director
Curatio International Foundation
Tbilisi, Georgia

Dean Allen
Treasurer
United States
CEO
McKinstry Company
Seattle, WA, United States

Eivor Halkjaer
Sweden
Former Swedish Ambassador and Former Senior Advisor to the Director General
Swedish International Development Cooperation Agency
Stockholm, Sweden

Supamit Chunsuttiwat, MD, MPH
Thailand
Senior Expert in Disease Control
Ministry of Public Health
Bangkok, Thailand

Kevin Reilly, MBA
United States
Former President
Wyeth Vaccines and Nutrition
Bryn Mawr, PA, United States

Awa Marie Coll-Seck, MD, PhD
Senegal
Executive Secretary
Roll Back Malaria Partnership Secretariat
Geneva, Switzerland
Executive leadership team

Christopher J. Elias, MD, MPH
President and CEO

Ayorinde Ajayi, MD, MPH
Vice President, Field Programs

Scott Jackson, MBA, CFRE
Vice President, External Relations

Jacqueline Sherris, PhD
Vice President, Global Programs

Eric Walker, MA
Vice President, Corporate Services

Program leaders

John Boslego, MD
Vaccine Development

Carlos C. (Kent) Campbell, MD, MPH
Malaria Control

Michelle Folsom, MPH
South Africa

Michael J. Free, PhD
Technology Solutions
Vice President and Senior Advisor for Technologies

Kateryna Gamazina, MD
Ukraine

Michelle Gardner, MSc
Vietnam

Jane Hutchings, MPH
Reproductive Health

F. Marc LaForce, MD
Meningitis Vaccine Project

Christian Loucq, MD
Malaria Vaccine Initiative

Brian McLaughlin, MS
Thailand and Cambodia

Anjali Nayyar, MS
India

Julie Pulerwitz, ScD, ScM
HIV/AIDS and Tuberculosis

Margarita Quintanilla, MPH
Nicaragua

Catharine Taylor, MSc Econ
Maternal and Child Health and Nutrition

Rikka Trangsrud, MA
Kenya

John Wecker, PhD
Immunization Solutions

Jiankang (Jack) Zhang, MS, MBA
China
Global presence

Headquartered in Seattle, Washington, United States, PATH works in more than 70 countries in the areas of health technologies, maternal and child health, reproductive health, vaccines and immunization, and emerging and epidemic diseases (including AIDS, malaria, and tuberculosis). We have offices in 29 cities in 19 countries.
Supporters and partners

Institutional supporters

PATH is grateful to all of our supporters. This list includes institutions that contributed $1,000 or more.

Foundations
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Atlantic Philanthropies
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The David and Lucile Packard Foundation
Elizabeth Glaser Pediatric AIDS Foundation
Eric T. Anderson Foundation
ExxonMobil Foundation
Fred H. Bioby Foundation
Horace W. Goldsmith Foundation
Laird Norton Family Foundation
Lee Family Charitable Lead Trust
The Live Oak Fund of Horizons Foundation
Lynn Foundation
Mariposa Foundation
McMinn Foundation
Michael & Susan Dell Foundation
Moccasin Lake Foundation
The Rockefeller Foundation
Rodman Foundation
Scoob Trust Foundation
Snyder Charitable Foundation
Susan and Richard Hare Family Foundation
Vanguard Charitable Endowment Program
William and Flora Hewlett Foundation

Governments and international agencies
Global Fund to Fight AIDS, Tuberculosis and Malaria
Health Systems Research Institute
Ministry of Health and Family Welfare, Government of India
Ministry of Health, Republic of Macedonia National Health Security Office, Thailand
National Institutes of Health
United Nations Children’s Fund
United Nations Development Fund for Women
United Nations Development Programme
United Nations Population Fund
US Agency for International Development
US Centers for Disease Control and Prevention
US President’s Emergency Plan for AIDS Relief
World Health Organization

Other organizations and corporations
ABD Insurance and Financial Services, Inc.
Bank of America Corporation
Blistex Inc.
Buzz Off Insect Shield, LLC
Cameron Catering
CH2M HILL
CollinsWoerman
The Commerce Bank
Davis Wright Tremaine LLP
DDB Issues & Advocacy
Educational Freedom Group enterpriseSeattle
ExOfficio LLC
Gallagher Reppond
Hanover Investments LLC
Heller Ehrman LLP
Incline Intelligence
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KG Investment Management
Kinzer Real Estate Services
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Universities and nongovernmental organizations
American Academy of Pediatrics
Cambodian Women for Peace and Development
Center for Strategic & International Studies
Family Care International, Inc.
Family Health International
International Child Support
International HIV/AIDS Alliance
Jhpiego
Johns Hopkins Bloomberg School of Public Health
JSI Research & Training Institute, Inc.
Plan International
Tulane University
University of Washington
VillageReach
Washington State University

Partners

Partnership is fundamental at PATH. Our major partners on the projects highlighted in this report are listed below.

Exploring promising technologies (pg. 7)
Fred Hutchinson Cancer Research Center
Information Mediary Corporation
Twist Dx

Learning how to make water safe (pg. 8)
PATH would like to thank the many organizations that are advancing safe water access worldwide, many of which generously shared their knowledge with PATH in 2008. The list of implementation partners will grow as the project advances. Current partners include:
Abt Associates Inc.
Cascade Designs, Inc.
Centre for Social Communication Programs
Emory University
Intellecap
Johns Hopkins University
MART
Massachusetts Institute of Technology
MBAs Without Borders
Monitor Company Group LP
RTI International
Sustainable Business Development, LLC
In particular, PATH would like to thank the Safe Water Project Technical Advisory Group members for their ongoing counsel, feedback, and participation.

Expanded frontiers for the Uniject® device (pg. 8)
Becton, Dickinson and Company
Gland Pharma Limited, India
Instituto Biológico Argentino
Instituto de Efectividad Clinica y Sanitaria
IntraHealth International, Inc.
Ministry of Health and Population, Nepal
Nepal Family Health Program
Nepal Morang Innovative Neonatal Intervention
Pfizer Inc.
Reproductive Health Division, Mali
Tulane University

Discovering new vaccine approaches (pg. 9)
Lentigen Corporation
World Health Organization

Investigating the link between health and agriculture (pg. 10)
International Potato Center
Partners (continued)

An advocate for the life of every child (pg. 11)
AIDS, Population, and Health Integrated Assistance Program
Ministry of Health, Kenya

Preventing mother-to-child transmission of HIV (pg. 13)
Department of Health, Eastern Cape, South Africa
Health Information Systems Programme
South Africa Partners, Inc.

Protecting vaccines from cold (pg. 14)
Airecor Limited
Aridis Pharmaceuticals
Crucell
Indian Immunologicals Limited
Novartis Vaccines and Diagnostics
Pharmaceutical Product Development, Inc.
Serum Institute of India Limited
Spring Valley Laboratories, Inc.
University of Colorado

Safer, more effective injections (pg. 14)
Biologics Consulting Group, Inc
D’Antonio Consultants International, Inc
Fundación Dominicana de Infectología de la Florida
Medical Device Consultants International Ltd.
PharmaJet, Inc.
Sustainable Business Development, LLC
US Centers for Disease Control and Prevention
World Health Organization

Helping women protect themselves (pg. 15)
CARE
Family Health International
Gramin Evam Nagar Vikas Parishad
Hindustan Latex Family Planning Promotion Trust
International HIV/AIDS Alliance
Janani
Karnataka Health Promotion Trust
National AIDS Control Programme
Orchid
Pathfinder International
Patna Network for Positive People
Sewa Sankalp Evam Vikas Samiti
Srikakulam Network of Positive People
State AIDS Control Societies, India
Suraksha Society
Tamilnadu AIDS Initiative
Transport Corporation of India Foundation
USER Manipur
Youth Club of Bejjipuram

Improved nutrition for Indian children (pg. 16)
Adorella Alimentos Ltda
Center for Public Nutrition and Development, Government of China
Department of Biotechnology, Ministry of Science and Technology, Government of India
Global Alliance for Improved Nutrition
Indian Institute of Crop Processing Technology
Naandi Foundation
Swagat Food Products (P) Ltd.
Union de Arroceros, S.A.
University of Toronto

Using pharmacies to halt epidemics (pg. 16)
All-Ukrainian Network of People Living with HIV/AIDS
HIV/AIDS centers and sexually transmitted infection clinics in Kyiv, Cherkasy, and Kyivs’ Rih, Ukraine
International HIV/AIDS Alliance in Ukraine
Local HIV-service organizations in Ukraine
Municipal health department, Phnom Penh
Municipal health departments in Cambodia
National Centre for Tuberculosis & Leprosy Control, Cambodia
National Tuberculosis Program, Cambodia
National Tuberculosis Program, Vietnam
Pharmacists Association of Cambodia
Provincial departments of health in Da Nang, Hai Phong, Khanh Hoa, Thai Nguyen, Thua Thien-Hue, and Vinh Long, Vietnam
Provincial health departments in Cambodia
State Enterprise “Farmatsia,” Ukraine

Protecting girls and women from cervical cancer (pg. 19)
Alliance for Cervical Cancer Prevention
Catalan Institute of Oncology
Cervical Cancer Action
GAVI Alliance
Harvard University
International Agency for Research on Cancer
Ministries of health in India (Andhra Pradesh and Gujarat), Peru, Uganda, and Vietnam
Research and implementation partners in India, Peru, Uganda, and Vietnam
World Health Organization

Breakthroughs in malaria vaccines (pg. 20)
African study centers in seven countries
GenVec, Inc.
GlaxoSmithKline Biologicals
Infectious Disease Research Institute
International Centre for Genetic Engineering and Biotechnology
La Trobe University
Monash University
National Institute of Allergy and Infectious Diseases, National Institutes of Health
Queensland Institute of Medical Research
Sanaria Inc.
Seattle Biomedical Research Institute
US Military Malaria Vaccine Program
Walter and Eliza Hall Institute of Medical Research

Skills for life (pg. 20)
Center for Social Studies and Promotion
Ciudad Sandino Hospital
Instituto Promundo
Masculinity Network for Gender Equity
Men’s Association Against Violence
Ministry of Health, Nicaragua

Municipal Commission for Childhood and Adolescence, Ciudad Sandino
Municipal delegation, Ministry of Education, Ciudad Sandino
Puntos de Encuentro
Save the Children Norway

Documented progress in malaria control (pg. 20)
The Carter Center
Coalition of Media Against Malaria
Ethiopia
Global Fund to Fight AIDS, Tuberculosis and Malaria
Governments of Ethiopia, Mozambique, Tanzania, and Zambia
Health Alliance International
Malaria Consortium
Reaching HIV/AIDS Affected People with Integrated Development and Support
Roll Back Malaria Partnership
Tulane University
United Nations Children’s Fund
US Agency for International Development
US Centers for Disease Control and Prevention
US President’s Malaria Initiative
William J. Clinton Foundation
World Bank
World Health Organization

Tackling Kenya’s health challenges (pg. 22)
BroadReach Healthcare
Elizabeth Glaser Pediatric AIDS Foundation
Jhpiego
Ministry of Education, Kenya
Ministry of Medical Services, Kenya
Ministry of Public Health and Sanitation, Kenya
Society for Women and AIDS in Kenya
Western Region Christian Community Services
World Vision

Expanding access to children’s vaccines in Asia (pg. 22)
Angkor Hospital for Children, Cambodia
Chengdu Institute of Biological Products
Ministries of health in Cambodia and Vietnam
Technip
United Nations Children’s Fund
The University of Melbourne
US Centers for Disease Control and Prevention
World Health Organization

Healthy feeding, healthy babies (pg. 23)
CARE
Elizabeth Glaser Pediatric AIDS Foundation
International Center for AIDS Care and Treatment Programs
The Manoff Group
Ministries of Agriculture, Education, and Health and Social Welfare, Lesotho
mothers2mothers
United Nations Children’s Fund
University Research Co., LLC
RECOGNITION

- Charity Navigator’s highest rating of four stars for the fifth consecutive year.

- *Forbes* magazine’s list of the most efficient large charities.

- Razoo’s list of the top 100 charitable organizations.

- *Seattle Business* magazine’s Leaders in Healthcare Award for Outstanding Achievement and Innovation in Life Sciences for Dr. Michael Free, PATH’s vice president and senior advisor for technologies.

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