

Global Health



Duke is playing a pioneering role in the quest to improve health worldwide. With campaign support for our global health programs, we will strengthen the ability of our students and faculty to develop solutions that improve the well-being of people around the globe.

Good health is a key to global stability, and Duke is at the forefront of addressing this pressing challenge. We have a world-class medical center; we have superior programs in fields ranging from public policy to engineering to law; and we have talented faculty and students determined to make a difference. In 2006, we founded the Duke Global Health Institute (DGHI) to serve as a nexus for our interdisciplinary research, education, and service activities related to global health. In just five years, it has helped Duke build one of the strongest global health programs in the world.

Philanthropic support during the Duke Forward campaign can help us build on our success. New gifts will enable us to grow our global health faculty, expand our international partnerships, bolster collaborative links across our schools, and enhance our capacity to solve global health problems. By investing in the people and programs that can move the world forward, alumni and friends can elevate Duke's role as a world-recognized leader in global health.

Hands-On Education

In many places, people don't have access to doctors, hospitals, medications, and even information about the prevention of disease. As many as 21,000 children die every day from preventable or treatable illnesses like malaria, diarrhea, and tuberculosis.

Our students are ready to take on daunting problems like these and to change the world for the better—and we are giving them the tools to do it. Duke created one of the nation's first undergraduate certificate programs in global health five years ago, and we're now working toward establishing one of the first majors in global health. At the graduate level, master's, doctoral, and professional students are demonstrating a similar appetite for our programs. More than 70 students have completed our Master of Science in Global Health, though it was only established in the fall of 2009, and nearly one in three medical students conducts global health research during their third year.

At all academic levels, these programs give our students the chance to work alongside some of the world's most prominent scholars and translate classroom learning in the field. Through DGHI's Student Research Training Program, for example, we

are offering second- and third-year undergraduates the chance to spend a summer developing, implementing, and assessing a health-related project in Durham, Uganda, Kenya, Tanzania, India, or Costa Rica. Before that, they spend up to a year receiving research training and mentoring from faculty. Similar experiential learning opportunities are available to graduate and professional students.

Such experiences are crucial to equipping students with the knowledge and skills they need to be globally minded citizens. But student demand for our growing menu of experiential learning opportunities exceeds our current funding capabilities. The Duke Forward campaign will expand student access to these programs. Private support will also provide us the means to establish new global health partnerships that give students the chance to pursue hands-on training and carry out life-changing research.

YOUR GIFT OF \$100,000 OR MORE

can support programs that give undergraduate, graduate, or professional students in any school the opportunity to conduct fieldwork through DGHI.



NURTURING A PASSION

With support from the Aalok S. Modi Global Health Fieldwork Fund, undergraduate **Kathleen Ridgeway** spent a summer in a rural village in Togo, a West African nation, working to understand how malaria is diagnosed and treated. Charles Piot, a cultural anthropology professor, was her mentor, meeting with Kathleen regularly before she carried out the project and serving as her confidant when she was in Africa. He also agreed, at her suggestion, to lead an independent study course in cultural anthropology, where one of the projects involves producing a publication that highlights undergraduate research experiences in global health.

"Dr. Piot and other faculty continually challenge me to take advantage of the extensive resources Duke offers," says Kathleen, who has used a special Duke program to create her own major focused on global health, particularly on infectious diseases. She plans to pursue a Ph.D. in public health or epidemiology. "One of the most influential factors in my decision to attend Duke was the strong presence that the Duke Global Health Institute plays in undergraduate academic life," she says.

Scholarships and Fellowships

We seek to admit the most promising, dedicated students into Duke's global health programs and provide experiences that will allow them to put their passions to work. But to successfully enroll the top students from the U.S. and abroad, we must provide aid packages that put a Duke education within reach. Endowed scholarships and fellowships help make it possible for students to pursue a future in this field with a minimum of debt. The availability of this support is often a deciding factor in whether a student can attend Duke.

Support for scholarships and fellowships during the Duke Forward campaign will ensure that the brightest minds are able to devote themselves to addressing global health problems. This support can make a lasting difference both in the lives of individual students and in communities around the world.

YOUR GIFT OF \$250,000 OR MORE

can establish an endowed scholarship or fellowship for a talented undergraduate, graduate, or professional student who focuses on global health.

BRINGING CHANGE HOME

As a medical doctor practicing in Uganda, **Dr. Nixon Niyonzima** was often frustrated by the way poverty prevented people from having access to quality health care. Wanting to make things better in his home country, he set out to earn a Master of Science in Global Health from Duke, which was among the first degrees of its kind in the U.S.

Niyonzima was drawn to the strong reputation and interdisciplinary nature of Duke's global health program. "The fact that you can take courses in different schools and institutes across Duke was very appealing. Duke offers a unique menu no other university does," says Niyonzima, adding that he would not have been able to attend Duke without the fellowship he received.

Niyonzima initially thought he would focus on health economics, but because of his exposure to other specialties, he was ultimately drawn to oncology. Today, as he finishes up his graduate thesis, Niyonzima is back in Uganda working at the Uganda Cancer Institute. "I hope to use my experience at Duke to improve the quality of clinical care and research here," he says.



Faculty Support

Duke's commitment to global health is embedded in the fabric of the university. While most major universities' global health programs sit in schools of medicine or public health, ours crosses academic boundaries. With DGHI's coordination, faculty members and affiliates from nearly all of our schools teach global health classes, and students in our undergraduate certificate program represent more than 40 disciplines.

Our research efforts are also interdisciplinary and collaborative. For example, faculty in DGHI, the Duke Divinity School, and the Fuqua School of Business have worked together to develop an innovative leadership and management training course for health care managers in East Africa.

That commitment to interdisciplinary work, signaled by the founding of DGHI, has served as a powerful draw in attracting new global health faculty. But we need to do more to capitalize on the interest in our program by adding internationally renowned scholars who can drive our reputation and help us fully realize our potential.

Private support for endowed professorships in global health during the Duke Forward campaign will enable us to build a strong core faculty in fields that span sociology, medicine, public policy, economics, theology, and more. Funding is also needed to bring in visiting scholars and speakers to serve as research and teaching partners. Their presence will enhance our course offerings and research efforts, and engage students and faculty in new ways of thinking.

Our program can be only as strong as our faculty. Strategic investments in teachers and scholars across the campus will be vital to the future of global health research and education at Duke.

YOUR GIFT OF \$2.5 MILLION

can support endowed professorships that allow us to attract and retain a world-class faculty who provide exciting research and educational opportunities for students.

YOUR GIFT OF \$1 MILLION

can provide endowment support for visiting faculty from the U.S. and abroad to collaborate on research and help us broaden our reach.

YOUR GIFT OF \$100,000

can enhance the educational experience at Duke by helping us bring distinguished experts in global health to campus for short-term residencies or speaking engagements.

The Duke Global Health Institute brings together collaborative and multidisciplinary teams across Duke's 10 schools to solve complex health problems and to train the next generation of global health scholars.



LEARNING HOW TO MAKE A DIFFERENCE

The undergraduates working in **Robert Malkin's** Developing World Healthcare Technology Lab (DHT-Lab) know they'll be producing more than a paper. Students design both innovative health care technologies for developing countries and strategies to commercialize them.

"Students want the chance to make a difference, but they don't always know how," says Malkin M.S.E. '90, Ph.D. '93, a professor of biomedical engineering at Duke's Pratt School of Engineering and a faculty member in DGH who founded and directs the DHT-Lab. "This is a lab where students can learn how by tackling real engineering problems."

Nearly half a dozen products developed in the lab are currently being sold or distributed to hospitals in the developing world. One such product is an inexpensive and portable phototherapy device to treat infant jaundice, the world's leading cause of preventable brain damage. Another is a kit for an effective but inexpensive electrostimulation unit tester, which helps

hospital technicians identify medical equipment that needs maintenance. There's also the "Pratt Pouch," a small heat-sealed package that stores anti-retroviral drugs that HIV-positive mothers administer to their newborns to prevent the transmission of the virus to their child. It won a \$250,000 grant from the U.S. Agency for International Development for the 2011 "Saving Lives at Birth" Grand Challenge. Since then, thousands of Pratt Pouches have been manufactured and are starting to be distributed to HIV-positive pregnant women for testing.

"These projects that begin in the classroom have the potential to affect the lives of millions," says Malkin, who moved to Duke in 2004 in part because the university supported his desire to work with undergraduates. "Almost everything we do is made possible by donations."

"There is no more creative place to research the problems and dream the solutions than a university campus—faculty and students working together to change lives all around this world."

ABC News Anchor Diane Sawyer

ABC News selected the Duke Global Health Institute as its academic partner in a year-long series on global health.



Biomedical engineering professor Robert Malkin reviews a project with a student.

Research

TURNING ASSUMPTIONS (AND POLICY) UPSIDE DOWN

In 2009, the United Nations' Guidelines for the Alternative Care of Children were being created, and the drafts called for shutting down all orphanages and residential-care facilities for children. Then, the first results of the Positive Outcomes for Orphans study—which has followed the progress of nearly 3,000 orphans in Asia and Africa for more than five years—were released. Led by **Kathryn Whetten**, a professor of public policy and global health with appointments in nursing and community and family medicine, the study suggested the overall health of orphans in institutions is no worse than those living in communities. Consequently, the guidelines were amended and became more flexible. Rather than closing these institutions, the guidelines now say they should be used only as “a last resort.”

The National Institutes of Health underwrote Whetten's ten-year, multi-country study with a \$10 million grant. But early seed funding provided by Duke paved the way. That funding helped Whetten and her team travel to Tanzania, establish partnerships, and conduct two small pilot studies, one with HIV-positive adults and the other with orphans.

“We would not have received these large NIH grants without the pilot study,” says Whetten, who meets with UNICEF officials at least once a year to discuss findings and policy implications of the ongoing study. “Duke has worked systematically at breaking down barriers for conducting research, and their focus on interdisciplinary collaborations was one of the primary reasons why I came to Duke and why I have stayed.”

Duke scholars are conducting studies around the world that are improving policy and practice. Our faculty are working to reduce indoor air pollution in India, improve cervical cancer screenings in Kenya, and develop the best approaches to obesity prevention in sites across the United States.

All such meaningful research begins with an idea. But the challenge our researchers often face is finding proof-of-concept funding to build out their ideas, particularly in a field like global health where studies often require international partnerships and cross-cultural teams. DGHI provides small seed grants to Duke researchers to help them get their projects off the ground—and the return on this investment is often tremendous. Seed grants have led to millions of dollars in additional research funding from organizations such as the National Institutes of Health and the U.S. Agency for International Development.

But because of limited resources, we've been able to support only a handful of research projects this way. Private support during the campaign will increase our capacity to provide early seed money and travel funding to researchers pursuing innovative and applied research projects around the world. This support will offer faculty the means to collaborate with international partners and position them to receive large, multi-year grants from more traditional sources such as governments and foundations. Your philanthropic investment can help researchers turn ideas into action that improves lives.

YOUR GIFT OF \$100,000 OR MORE

can support a seed fund for faculty research to help jump-start projects with the potential to make a difference.

YOUR GIFT OF \$100,000 OR MORE

can provide travel and research support to help faculty engage in cross-cultural and cross-disciplinary research projects.



HOW WILL
YOU MOVE
DUKE FORWARD?