Lisa Adams, an assistant professor of medicine and a leader of Geisel's partnership with Rwanda, works with colleagues at a teaching hospital in Rwanda.

DEVELOPING RWANDA'S MOST IMPORTANT RESOURCE

TEXT AND PHOTOS BY LARS BLACKMORE

TWO HOURS SOUTH OF KIGALI, THE CAPITAL OF RWANDA, at the teaching hospital affiliated with the small nation's only medical school, Laura Shevy, an internist from DHMC, is trying to manage dozens of patients while teaching a crowd of medical students and residents. In this resource-poor setting many things could make Shevy's job as a physician and educator easier: reliable water and power, skilled subspecialists—even something as pedestrian as a working stapler. But as it is, she improvises, relying on her American colleagues for support and consultation at the hospital, and on long trail runs and bike rides across the beautiful Rwandan countryside to clear her head.

Shevy is one of roughly 50 physicians and nurses from Geisel and a dozen other American medical schools who are committing a year of their careers to working for the Ministry of Health in Rwanda as part of the Human Resources for Health Program (HRH), which was launched in 2012. As faculty members, the visiting physicians teach and mentor both medical students and residents, and they round on the wards and see patients. The goal is to train skilled physicians and medical school faculty to serve a country that badly needs more of both.

Mention Rwanda and people invariably think of the 1994 genocide that devastated the landlocked country. About 800,000 people—most of them members of the Tutsi ethnic group—were killed in a matter of weeks; thousands fled the country. The health system was crippled as a result, in part because many of the country's physicians (most of whom

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A woman farms in Kinyinya, a suburb to the north of Kigali, which lies in the background.

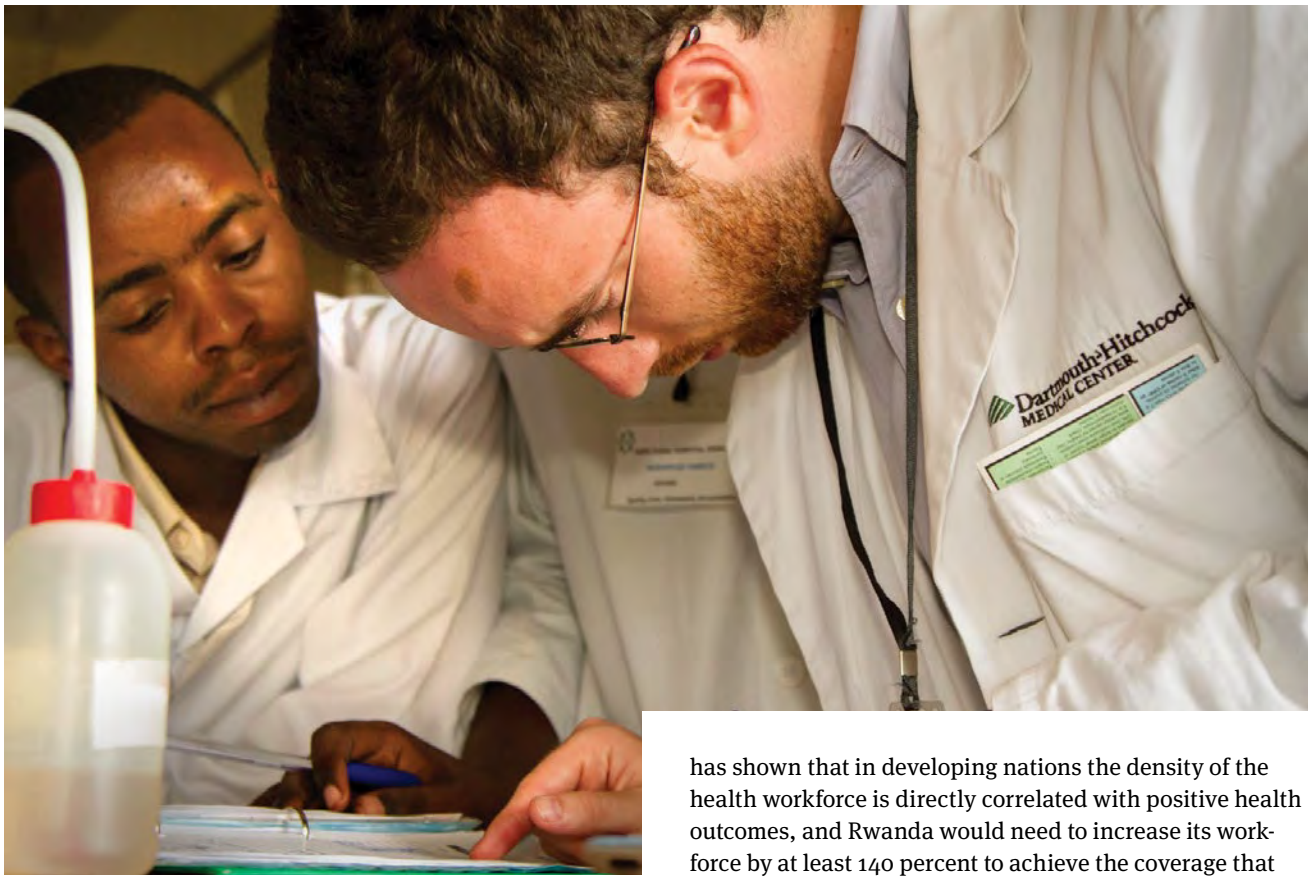
were Tutsi) were killed or exiled. Its society in tatters, Rwanda's basic health indicators, such as life expectancy, plummeted. Infectious disease became rampant, and the infant mortality rate went through the roof.

Rwanda has spent the past two decades recovering, and at least in terms of public health, the country has exceeded even the most optimistic expectations. Life expectancy has doubled since the genocide, and the country recently declared that it had met the United Nations Millennium Development Goal for reduction in child mortality ahead of schedule. The country has implemented a state-run health insurance plan that offers everybody access to care, and it has made strategic use of funding earmarked to combat specific diseases like HIV to strengthen the entire health-care system. Health care forms an integral part of the government's ambitious long-range plan to transform the country into a middle-class nation by 2020.

Still, a casual glance at the vital public-health statistics for Rwanda would indicate merely an average sub-Saharan African nation, one with fairly high infant mortality and moderate life expectancy. What is so striking about these figures for Rwanda is the incredible turnaround they represent, and the implicit potential for further improvement. The headlines have been positively gushing, with the *New York Times* calling it a "health care miracle" and Paul Farmer of Partners in Health declaring that "Rwanda is honestly starting to change the face of global health."

This success has brought new challenges, however. With most basic public health needs met, a plethora of noncommunicable diseases known only too well in the developed world

A view of Kigali, the capital of Rwanda and home to just under one million people.



Dorey Glenn, a resident in pediatrics at DHMC, is one of several physicians with Dartmouth ties to take part in the HRH program over the past year.

Adams spent the last six months of 2012 in Rwanda helping to get the HRH program off the ground.

are appearing, including cancer, heart disease, and chronic illnesses such as diabetes. There's also a need for improved intervention at both ends of the life cycle: the country has no neonatal nurses and can currently offer little in the way of palliative care.

The real challenge is one of capacity—a shortage of skilled health-care workers. The World Health Organization (WHO) has shown that in developing nations the density of the health workforce is directly correlated with positive health outcomes, and Rwanda would need to increase its workforce by at least 140 percent to achieve the coverage that the WHO deems necessary to "allow essential health interventions to make a positive difference in the health and life expectancy of their populations."

Rwanda needs everything from nurses to subspecialists, and lots of them. The Rwandan Ministry of Health is all too aware of this but is determined to address the problem in a way that builds the necessary capacity within the country. That is, it recognizes that Rwanda doesn't just need doctors, it needs the capacity to train more doctors.

Hence the creation of the Human Resources for Health Program. Funded largely by existing U.S. aid to Rwanda, the program is an audacious Rwandan plan to improve the quality and capacity of in-country postgraduate medical training. It aims to swell the ranks of medical school faculty and help the faculty train more doctors to fill the gaps in the health-care system.

Bill Clinton called the program revolutionary when he first announced it in his role as midwife and facilitator at the Clinton Global Initiative, highlighting two elements that set it apart from most bilateral global health or development efforts. First, it was developed by the Rwandan Ministry of Health to meet the Ministry's perceived

requirements (as opposed to those of the donor) and is managed by the country itself; second, the project aims to phase out foreign aid and revert to funding by the Rwandan government directly.

The HRH program is a pioneering effort, and as such it requires those participating in it to learn and adapt. Once on the ground, Geisel faculty members must be flexible as they negotiate life in Rwanda. The setting is safe and fairly functional, but cultural differences and taking on an unfamiliar role as educator-physicians can be challenging. They have to remember to teach and help teachers teach, rather than simply doing things for themselves. On a recent visit to Dartmouth, the Rwandan Minister of Health, Agnes Binagwaho, met with Geisel's global health leadership to discuss lessons learned from the first year of the project and explore future collaborations, including possible opportunities for Geisel students and for faculty exchanges.

Binagwaho's excitement is palpable and contagious, and she is keen to express her gratitude for Geisel's commitment to the project and to the people of Rwanda. Years of work in places like Haiti, Peru, Kosovo, and Tanzania have placed Geisel prominently on the global health map. As a partner in the HRH program the school is now in a position to contribute to and learn from a groundbreaking long-term global health project.

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Rwandans walk along a road in a rural area north of Kigali.

RWANDA AT A GLANCE

Population: 11 million

Area: About 10,000 square miles, or a little larger than Vermont or New Hampshire

Population density: About 1,000 per square mile, making it one of the most densely settled countries in Africa

Population growth rate: About 3 percent, one of the highest rates in Africa.

Life expectancy: About 56, more than twice as high as it was in the mid-1990s following the genocide and now on par with other countries in sub-Saharan Africa

GDP: About $600 per capita.