As technology shrinks the world, our neighbors in developing countries seek sustainable solutions to their educational, socioeconomic, and health care issues.

Graduate and professional students at the University of Iowa are working on the ground in remote locations abroad, forging multidisciplinary research projects that create safer and healthier societies.

There is no substitute for the positive impact of one-on-one personal interactions, and these Iowa scholars make that happen in villages, family homes, and farms all over the world.

UI students promote the Ponseti Method as an effective treatment for clubfoot in southeastern Brazil and Peru; they teach people to boil water as a method of household water treatment in India; they assist with a successful polio eradication program in Senegal. This is just a snapshot of their outreach efforts.

Students presented their work on these and many other projects at the first Iowa Graduate Global Health Symposium Nov. 7, 2012 at the College of Public Health. UI graduate/professional students and faculty delivered poster presentations and submitted photographs for a photography contest, illustrating their original research projects.

The Executive Council for Graduate and Professional Students (ECGPS) organized the symposium to increase collaboration and improve networking between students, faculty, and staff who participate in global health activities at the UI.

—Continued on the next page
POST-DISASTER WATER SANITATION. Photo by Luke Juran (pictured in the center), who travelled in India to conduct research in post-disaster water sanitation through a Fulbright grant. The area of India he studied was severely impacted by the Indian Ocean tsunami in 2004. Juran visited over 25 post-disaster settlements and spoke with the affected populations, trying to identify the most important problems they were facing. What he learned was that access to water, quantity and quality of water, and issues with toilet and sewage infrastructure were the root causes behind many of the larger issues in these settlements. With this in mind, Juran decided to investigate the problem of water quality further by closely studying 14 settlements in two separate states. He interviewed members of the community, tested water quality, and spoke with government officials on why these problems were occurring and how they might be averted in the future.

In addition to his dissertation research, Juran strove to engage in person-to-person diplomacy and to give back to the communities with which he was working. One way he was able to do this was through the identification and referral of children with cleft-lip and cleft-palates, and 27 of those cases received free remedial surgeries. He also arranged the donation of 21 goats to the local community.
A clean and sustainable source of light promotes good health. Here we see solar lamps charging in a rural village near Chitrakoot, Madhya Pradesh.

These lamps prevent hazardous indoor air exposures, encourage reading, and reveal nighttime hazards.

“This is a grassroots effort by students who are trying to improve the lives of people somewhere else,” says Jonathan Schultz, symposium organizer and UI second-year medical student. “The disparity you see in developing countries is so utterly different than here in every aspect of life. It’s just not fair for them. It’s about social justice: the right to health care, the right to sanitation, the right to hygiene.”

Rene Genadry, M.D., UI clinical professor of obstetrics and gynecology, presented a poster at the symposium about the quality of life of women with obstetric fistula in Bangladesh. He is impressed by the quality, scope, and amount of global health research Iowa students conduct.

“It is refreshing to see these talented students, through their enthusiastic engagement on the ground, spearheading the effort to widen and deepen the exposure and commitment of their fellow students and faculty in the field of global health,” Genadry says. “They have understood the importance of partnering with a variety of disciplines to bring about the best solutions to common problems with differing implications to culture and environment.”

Luke Juran
Luke Juran, who earned his Ph.D. in geography in November 2012, says the only way you can make a difference in the developing world is by spending time with the people and gaining an understanding of their problems.

Juran conducts most of his research in India, Sri Lanka, and Bangladesh, looking at how to improve reconstruction outcomes following natural disasters. Juran specializes in research on the best ways to rebuild safe water supplies.

“We live in an interconnected world, and there’s no going back from that,” says Juran, who recently conducted research on post-disaster water sanitation in India through a Fulbright grant.
“Disasters will continue to impact every corner of the globe. We learn lessons for reconstruction after each disaster, and we want to improve that process because it is going to be replicated across different disasters and across different cultures. I perceive issues surrounding water and disasters as universal, but their solutions are determined locally.”

**Erin Reynolds**

Erin Reynolds says it’s not easy to witness poverty and public health concerns that pervade an entire population. Reynolds, who earned her Ph.D. in epidemiology in October 2012, worked in the rural community of Tamil Nadu, India, developing an educational intervention for chikungunya fever—a mosquito-borne disease characterized by severe joint pain.

“We can turn on any faucet and not have to worry if the water is clean or not,” Reynolds says.

“We can turn on any faucet and not have to worry if the water is clean or not. Problems globally versus domestically are so much more acute in the low-income countries. Those are the people who need us the most.”

—Erin Reynolds, Ph.D. epidemiology
GLOBAL OUTREACH

“Problems globally versus domestically are so much more acute in low-income countries. Those are the people who need us most. The things we need help on are obesity and nutritious food; we’re not really looking at a lack of food, period,” says Reynolds.

Such international problems are multi-layered, with interacting factors that include social, environmental, economic, and political complications. Understanding these complexities is critical to adapting solutions to specific circumstances.

“We want safer societies, we want healthier societies, and we want people to get along,” Juran says. “Real goals are being worked toward by people at the University of Iowa. Not everything is theory, not everything is stuffy. There are things happening on the ground that have real implications to help people.”

There is no shortage of projects on the students’ plates. “The developing world is hungry for what Iowa can provide, not only in food, but in talent and well-thought-out solutions,” Genadry says.
Part of the mission at the University of Iowa is to provide educational training and experiences that broaden perspectives. Many of Iowa’s graduate students have found ways not only to pursue their research, but also to reach populations in need around the world. The result is a win-win.

The Graduate College invests in international professional development and research with the T. Anne Cleary International Dissertation Research Fellowship. This award provides funds for select UI doctoral candidates to conduct dissertation research outside of North America, and is available to all disciplinary areas.

“We live in an interconnected world, and there’s no going back from that. We learn lessons for reconstruction after each disaster, and we want to improve that process because it is going to be replicated across different disasters and across different cultures.”

—Luke Juran, Ph.D. in geography

Investing in global research


This woman purchased these spectacles in the local village market, where many villagers go to find cheap solutions to health issues such as substandard antimalarial or diarrhea drugs. The market is the only place for this woman to find and afford eyeglasses. The glasses are probably not the right prescription or be the solution but might help a little bit so that she can continue coming to the market to sell her products.