

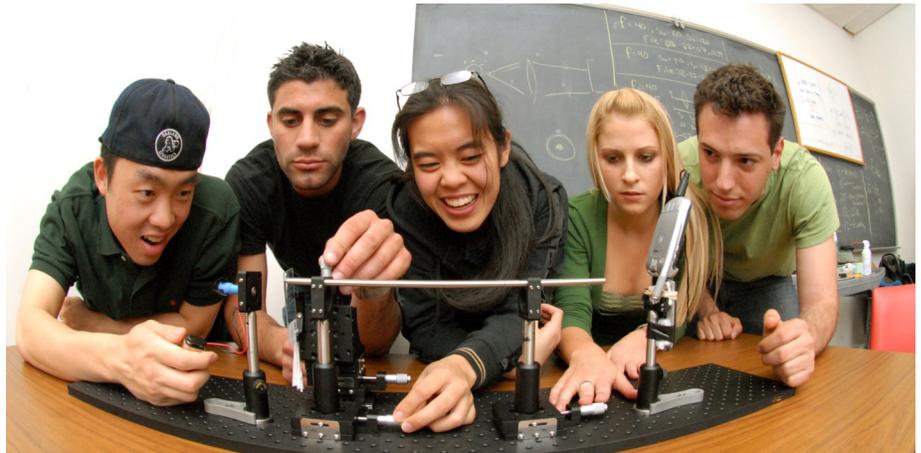


University of California at Berkeley

Development Impact Lab

Connecting to Accelerate Global Development

The Higher Education Solutions Network (HESN) is a partnership between USAID and seven world-class universities to create a constellation of Development Labs. This network harnesses the ingenuity and passion of university students, researchers, faculty, and their innovative partners to incubate, catalyze and scale science and tech-based solutions to the world's most challenging development problems.



Through support to the university-led Development Labs, HESN taps into a global pool of expertise to accelerate innovation through the discovery, creation, testing and scaling of efficient, cost-effective, accessible and sustainable solutions to global development challenges.

With \$137 million over five years from USAID, and leveraging nearly equal investments from the institutions, the universities form a collaborative and vibrant network that extends beyond 100 partner institutions in academia, civil society and government across 38 countries.

The Challenge

How do we connect scientists and engineers to the critical challenges of development to create a new generation of solutions to accelerate development impact?

The Innovative Approach

Led by the University of California, Berkeley, the Development Impact Lab (DIL) is an HESN-funded interdisciplinary network of researchers working to design development solutions that combine innovative market strategies and social interventions with leading-edge technological advances. The DIL consortium - which includes Lawrence Berkeley National Lab, UC San Diego, University of Washington, University of Michigan, Portland State University, the Indian Institute of Technology-Bombay, and several other universities - believes that designing technology to raise development standards should include a consideration of social and economic barriers from the outset.



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& MARY**

DIL's projects will demonstrate a new approach for designing, evaluating, and scaling novel solutions to development problems. These solutions are then rigorously tested and evaluated in the field so they may be applied at a larger scale. Concurrently, DIL's work is already revealing invaluable lessons that will be taught in the classroom. DIL is pioneering a new academic discipline intertwining science and engineering with socio-economic analysis, creating a new profession: development engineering. The outcomes of DIL's demonstration projects will be incorporated into the new course materials.

DIL is generating solutions that, for example, use alternative energy and communications to increase access to services in rural areas. In Indonesia, DIL partners are testing the Village Base Station, a low-cost cell tower that runs on solar and micro-hydro power. In India, they are evaluating a rural electrification solution designed by Gram Power Inc. that runs on solar-powered batteries affordable for low-income families. In Kenya, DIL teams are using a mobile phone app to monitor the reliability of the electrical power grid in real time while researching how lives improve when people get access to electricity.

The CellScope device turns a cell phone's camera into a diagnostic-quality microscope, allowing health workers in areas without labs to obtain analysis remotely. DIL is extending the technology so it can be used to diagnose the neglected tropical disease loiasis. DIL is also supporting the use of mobile phones for election monitoring in Kenya and a novel electro-chemical process to remove arsenic from drinking water. Other projects will strengthen the use of electronic cash transfers and mobile savings in multiple countries.



Through open competitions and prize contests, DIL is incentivizing the academic community by providing additional funding and support to those who more deeply address development challenges in their research. For example, DIL provides grants so U.S. researchers can visit developing countries to find collaborators and field-test solutions, and the university hosts visiting scholars to bring developing-country expertise directly to campus.

For more information

www.usaid.gov/hesn • <http://dil.berkeley.edu> • twitter.com/DevImpactLab