



## OVERVIEW

According to the World Health Organization, today there is a 36-year gap in life expectancy between countries. A child born in Malawi can expect to live only 47 years, while a child born in Japan can expect to live 83 years. Each day, 21,000 children die before the age of 5 because of pneumonia, malaria, diarrhea, and other diseases. But these diseases do not equally affect all children: Children from in the poorest 20% of households are nearly twice as likely to die before the age of five as children from the wealthiest 20 percent. In Chad, for example, 20% of children die before they reach the age of 5, while in European countries, only 1% of children do not reach their fifth birthday.

Within the U.S., persistent health disparities also exist between individuals of different racial, ethnic, and socioeconomic groups. Infants born to African American women are 1.5 to 3 times more likely to die than babies born to women of other ethnicities. African American men are more likely to die from prostate cancer than White men, and Hispanic women are more than 1.5 times more likely to be diagnosed with cervical cancer than white women.

## THE CHALLENGE

The challenge for the Global Health category is to describe an action-oriented, interdisciplinary project that would help alleviate a global health concern among low-resource communities. Proposals submitted to this category should (a) demonstrate an evidence of a widespread health concern faced by low-income populations or low-resource communities, and (b) develop a system, plan, or technology that addresses this problem that is both culturally appropriate within the target communities, and appropriate for low-resource settings.

Examples of proposals include (but are not limited to):

- A medical innovation project that promotes effective diagnosis or treatment
- A public health containment effort or surveillance technique to address infectious disease epidemics
- A public health prevention project that raises awareness among at-risk populations
- An economic, public policy or advocacy-based initiative that aims to reduce barriers to accessing effective health services in underserved communities.

# BIG IDEAS PAST WINNERS

## JACARANDA HEALTH

*3rd Place Winner, Global Poverty Alleviation (2012)*

Jacaranda Health works to address safe motherhood in the underserved peri-urban areas of Nairobi through a model that combines mobile health vans with high-quality local clinics. Jacaranda's mobile health van system provides antenatal and postnatal care. The vans also offer labor and delivery services, allowing for the much-needed continuity of care in traditionally underserved areas. Jacaranda's non-profit healthcare uses evidence-based standards of medicine, quality improvement methodology, and is driven by feedback from clients.

**Status:** Nick Pearson and the Jacaranda team continue to build a new model for maternal and newborn health in East Africa. With 25 clinics in 2015, they hope to ultimately reach 1M+ poor women with their services.

<http://jacarandahealth.org/>



## EMMUNIFY

*3rd Place Winner, Scaling Up (2015)*

*1st Place Winner, Maternal & Child Health (2013)*

Emmunify uses mobile technology to help vaccinate infants in the most underserved regions of developing countries. Emmunify tracks the status of each child, reminds clients of where and when vaccines are available, and facilitates logistics and supply by aggregating utilization and supply data. Emmunify eliminates paper records by providing an innovative low cost, focused portable electronic medical record (EMR) that digitizes and replaces the frequently lost or mutilated paper immunization record. It holds multiple copies of each record in its cloud-based database, as well as storing them on an RFID sticker placed on the family's mobile phone.

**Status:** The Emmunify team piloted their prototype in New Delhi slums with Aarushi Charitable Trust. They are currently working to scale up their system to roll it out for use with new children this summer.

<http://emmunify.org/>



## CELLSCOPE

*1st Place Winner, Scaling Up (2010)*

*1st Winner, IT for Society (2007)*

There is an urgent need for greater access to reliable diagnostic testing, particularly for infectious diseases in emerging regions. CellScope's objective is to establish mobile digital microscopy as a platform for disease diagnosis that can be used by non-expert health workers in remote settings. The mobile phone-based, easy-to-use digital tool-kit can rapidly capture images blood, sputum, or other patient samples and wirelessly transmit the data to clinical centers, for remote evaluation and treatment. By using existing infrastructure, CellScope is helping take clinical microscopy out of specialized laboratories and into field settings.

**Status:** CellScope was part of Rock Health's inaugural class of healthcare startups and is funded by Khosla Ventures. They also run an active DIL pipeline project and in 2013 they tested the Oto on the Colbert Report.

<https://www.cellscope.com/>

