

# GO Mosquito Challenge Project

USAID Global Innovations Week & 2017 Bill and Melinda Gates Grand Challenge

USAID Global Innovations Week was held Sept. 27-Oct. 3, Washington, DC, and featured an innovation marketplace with nearly 100 innovators demonstrating products across sectors such as agriculture, health, water, sanitation, and hygiene.

The Institute for Global Environmental Strategies (IGES) hosted a demonstration table in the USAID Innovation Marketplace and was invited to give a lightning talk about the GO Mosquito Challenge, a project funded by USAID's Combating Zika and Future Threats initiative. The GO Mosquito Challenge leverages the GLOBE Observer Mosquito Habitat Mapper App and the GLOBE Network of teachers, students, scientists, and citizen scientists in Peru and Brazil.

Project PI Low was also sponsored by USAID to present at the 2017 Bill and Melinda Gates Foundation Grand Challenges Meeting in Washington, D.C. on October 1-4. Low served as a panelist at the *Accelerating Development Through Breakthrough Global Education Innovations* track. There were approximately 50 attendees in this track. GO Mosquito Challenge Project was selected to present in the poster session, which had an attendance of close to 800.

**Empowering Kids as Agents of Change**  
**GO Mosquito Challenge**

**Piloting in Brazil and Peru, this game-changing solution is using the power of kid citizen science to combat Zika.**

**THESE MONSTERS ARE VIRTUAL**  
You've seen kids chasing and capturing virtual reality monsters on their mobile phones.

**BUT THESE MONSTERS ARE REAL**  
What if kids were as excited about getting rid of real monsters—the mosquito vectors that cause illness and kill millions of people every year?

**THE PROBLEM**  
*Aedes aegypti* breeds in cryptic places (storm drains, roof gutters, etc). Locations change quickly, and are time consuming to find and eliminate.

**Teachers and Students to the Rescue**  
Leverage the international GLOBE Program network of partners, teachers, students, and scientists to train and support a student citizen science corps needed to zero in on breeding sites of mosquitoes, and demonstrate the value of this pilot citizen science project to reducing the threat of Zika.

**GLOBE Observer Mosquito Habitat Mapper**  
Easy-to-use mobile platform to:  
• Identify and report potential and active mosquito breeding sites; and  
• Sample and count larvae.  
In-app key to:  
• Determine whether the larvae found could potentially mature into vectors of mosquito borne disease;  
• Eliminate the breeding sites; and  
• Upload data

**Provide Key Incentives**

**FOR TEACHERS**

- Training workshops
- Educational materials & Curriculum
- Classroom equipment
- Ongoing support

**FOR STUDENTS**

- Leaderboards to inspire data collection
- Digital games to build skills
- Virtual scientist mentoring
- International Science Fair and prizes

**Connecting to Public Health**  
Open-source data accessed via a map interface by public health professionals and scientists. The data also serves as ground verification for scientists who model mosquito population dynamics and predict disease outbreaks.

**South America Map, Artist's rendition of probability heat map showing predicted presence/absence of *Aedes aegypti*:  
RED = greatest probability  
BLUE = least probability**

• **GO Mosquito project pilot locations**

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