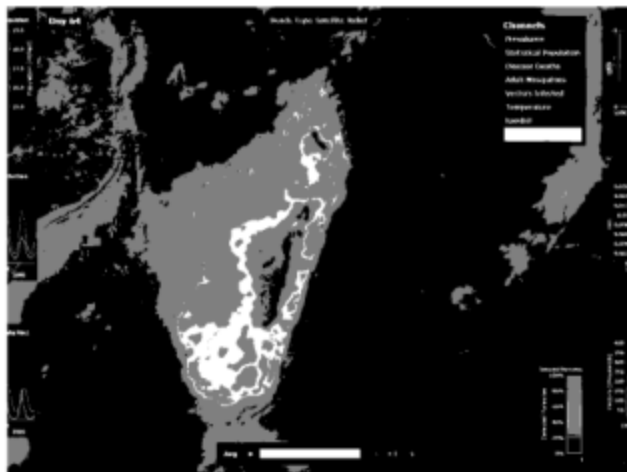


The Global Good Fund is a collaborative effort between Bill Gates and Intellectual Ventures. Our goal is to combine the power of invention with innovative business strategies to develop solutions that generate sustainable impact in the developing world.

Our Approach

Global Good tackles problems in the developing world by using resources and methods normally reserved for commercial pursuits. We work closely with the Intellectual Ventures Laboratory (IV Lab) to create innovative solutions in Global Health and Development. Guided in part by the expertise of partner organizations such as the foundation, Global Good focuses on important problems where invention can translate into meaningful impact in developing countries. These include **Disease Modeling, Vaccine Logistics, Vector Management, Malaria and TB Diagnostics, Maternal and Child Health and Agricultural Productivity**. Our goal is to think big and take on problems with unconventional approaches that will hopefully create breakthrough inventions that solve real world problems. To maximize the extent of this impact, Global Good partners with key industry players that offer unprecedented manufacturing and distribution capacity on a global scale. These partners benefit from the inventions generated by IV Lab, and in return, commit to building a dynamic, economically-viable business ecosystem around these solutions.

Global Good is a for-profit entity that subscribes to Global Access principles. This means that our partners benefit from royalty-free commercialization of our inventions in the developing world. Royalties generated from commercialization of our inventions in the developed world are invested back into The Global Good Fund to repeat the cycle.



Left: We have developed new computer models that calculate not only how diseases spread in a particular part of the world, but also how they will respond to deliberate suppression efforts.

Our team of business analysts and IV Lab experts evaluates each problem to assess the opportunity for invention and impact. We encourage the staff at the Bill & Melinda Gates Foundation to share problems with our team for evaluation and possible research and development activity. We have also dedicated staff to handle one-off inquiries received from the staff at the Bill & Melinda Gates Foundation. In situations where we may have limited ability to tackle a problem, Global Good

could play an advisory role, connecting you to qualified external teams.

Global Good does not fund externally-driven projects or provide grants to third-parties. We do not refer external researchers who are seeking funding for their projects to the foundation.

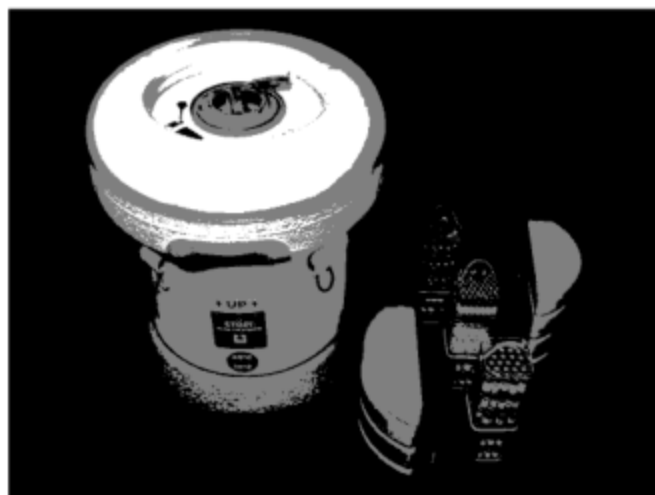
What We Offer

Our biggest resource is IV Lab, a team of more than 130 inventors, scientists and engineers, including more than 30 Ph.D.s, operating under the principle of 'invent with intent'. From initial project definition to commercial partner handoff, IV Lab plays a pivotal role in Global Good's efforts to invent technologies and develop solutions. IV Lab focuses on the very early stages of innovation by conducting proof-of-

concept experiments and building prototypes that establish the validity of its ideas. These invention, research, and development activities transform untested ideas into viable solutions that can advance to commercialization and deployment. To do this, IV Lab has built expertise and capability around various technology platforms that target specific problems in each thematic area. These technology platforms include super-insulated containers, advanced thermal management technologies, biological micro-manipulation, automated microscopic sample preparation and analysis, automated disease diagnostics, insect vector targeting and tracking systems, microfluidic systems, and robust electro-mechanical devices for use in resource limited settings. As an example, our expertise in super-insulated containers and advanced thermal management helped us develop solutions in both vaccine logistics (Passive Vaccine Storage Device) and agricultural productivity (Milk Transportation and Storage Device).

Recent Accomplishments

Strengthening and Extending the Vaccine Cold Chain - Inventions to store and transport vaccines can help reduce the nearly one million childhood deaths each year from vaccine-preventable diseases. One of the greatest challenges to reaching children for vaccination is preserving the vaccine cold chain. We invented the Passive Vaccine Storage Device which uses super insulation techniques to store vaccines at safe temperatures for months using only ice. Vaccines can then be retrieved without jeopardizing the remaining vials and the insulated container can remain in the field for repeated use. The units are currently undergoing field testing in Kenya. Commercial manufacturing and distribution is planned for mid-2014.



Improving TB diagnostics in developing countries - when dealing with sputum, the standard clinical specimen for TB diagnostics, sample preparation and processing presents substantial technical challenges. Our team of engineers and chemists are developing a novel method to concentrate and capture bacteria from sputum that has the potential to greatly simplify hands-on processing of specimens prior to detection. With support from TB experts around the world, IV Lab is developing TB diagnostic procedures that may be more sensitive and easier to use than microscopy, while retaining the key attributes required within developing world health systems.

Computer models for eradication and control of infectious diseases - The Institute for Disease Modeling (IDM) at IV Lab has developed detailed, geographically-specific, and mechanistic stochastic simulations of disease transmission. These modeling and quantitative analysis tools are used as decision-making tools to determine the combination of health policies and intervention strategies that can lead to disease eradication or control of infectious diseases.

Engage with Global Good

Global Good invests its own capital in the initial, high-risk phase of invention and R&D. We work together with our colleagues at the foundation to ensure the end solution is applicable and commercially viable for the developing world. Please contact Ali Arjomand at Global Good (aarjomand@intven.com) for more information.

Together, we invent, develop, and deploy commercially-viable technologies that improve life in developing countries.

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