



## WHAT WE FOCUS ON





**Amplify** 

We amplify the effectiveness of proven tools through delivery and distribution.

**Innovate** 

Where tools do not exist, we invest in innovation and research.

### **GLOBAL HEALTH**

Discovering and developing affordable vaccines, drugs, and diagnostics for people in the developing world.

#### **Programs:**

Enteric and Diarrheal Diseases HIV Malaria Neglected Infectious Diseases Pneumonia Tuberculosis



### GLOBAL DEVELOPMENT

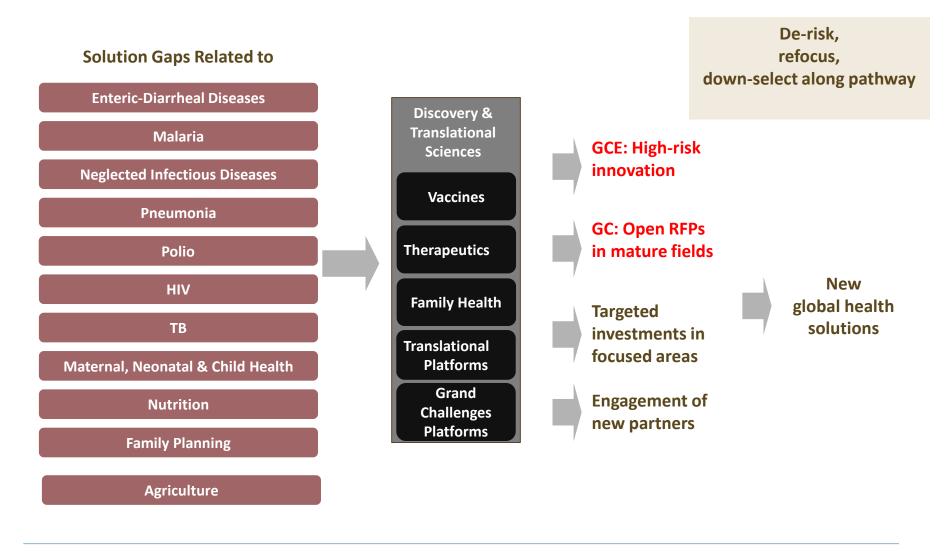
Delivering health and development solutions that help people lift themselves out of poverty.

### **Programs:**

Agricultural Development
Emergency Response
Family Planning
Financial Services for the Poor
Global Libraries
Maternal, Neonatal & Child Health
Nutrition
Polio
Water, Sanitation & Hygiene



## Discovery & Translational Sciences Targets and Funding Mechanisms



### **GRAND CHALLENGES**

A family of grant programs fostering innovation to solve key global health and development problems

- Define challenges whose solution would unleash progress in key areas
- Engage the world's most innovative researchers
- Focus research on making an impact for those most in need
- Build partnerships to accelerate impact
- Build on an expanding global network of programs and partners

#### grandchallenges.org













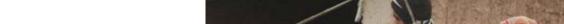












	Grand Challenges in Global Health	Grand Challenges   EXPLORATIONS
What do we seek	Innovation, Experience, Capacity, Proposal Value, Impact	Innovation, Impact
Funding	Matched to specific challenged (\$0.5M - \$20M)	Phase I = \$100K Phase II ≤ \$1M
Timing	Annually on selected topics	Twice yearly on multiple topics
Proposals	Format matched to challenge	Two page application, no data required
Partners	Grand Challenges Canada  FOUNDATION	CONFAP  GRAN MINISTRY REIGN AFFAIRS  GRAN MINISTRY REIGN AFFAIRS

## Grand Challenges: Grant Opportunities



## PUTTING WOMEN AND GIRLS AT THE CENTER OF DEVELOPMENT

**Goal:** Determine how to effectively reach and empower the most vulnerable women and girls to improve health, development and economic outcomes, as well as gender equality



# Creating and Measuring Integrated Solutions for Healthy Birth, Growth and Development

**Goal:** Develop new measurement tools and new combinations of approaches to ensure all children thrive – that they not only survive, but also have the chance to lead healthy productive lives



#### **New Interventions for Global Health**

**Goal:** Create innovative concepts for vaccines, therapeutics and diagnostics with the potential to be translated into safe, effective, affordable and widely-used interventions

### **GRAND CHALLENGES EXPLORATIONS**





### Anyone can apply

- From any country and any discipline and at any level of experience
- From academia, government, non-profits, or industry
- Review is "blind" and champion-based

## Applying is easy

- Two-page application
- No preliminary data required

### Awards are frequent and rapid

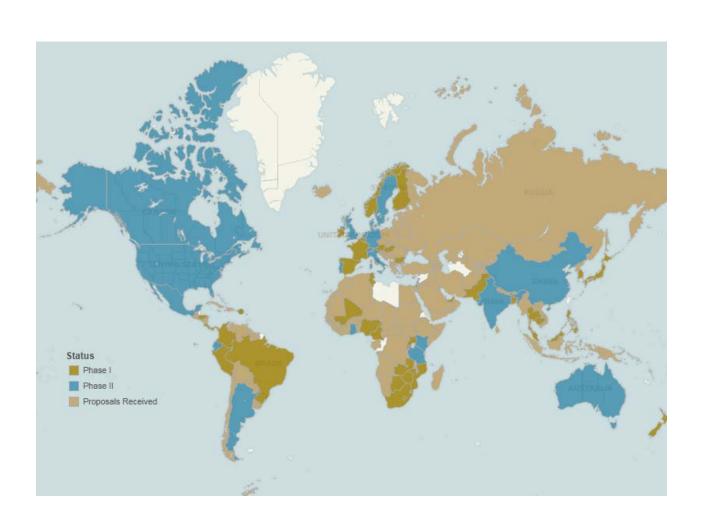
- Two opportunities to apply each year
- Awards made in 4-6 months
- Phase 1 funding of \$100,000 can lead to Phase 2 funding of up to \$1 M

## GCE STATS

Phase I Applications
14 rounds of solicitations
Over 50,000 applications
from over 190 countries

# Phase I Grants 18 months, \$100k 1042 grants from 61 countries

# Phase II Grants Up to 2 years, up to \$1M 105 grants from 20 countries





# Accepting applications until May 13, 2015 at <a href="https://www.grandchallenges.org">www.grandchallenges.org</a>

#### To date:

- Over 50,000 applications from 190 countries
- Over 1100 Phase I awards to researchers from 60 countries
- Over 100 projects with Phase II funding

### Round 15 topics:

- Addressing Newborn and Infant Gut Health Through Bacteriophage-Mediated Microbiome Engineering
- Explore New Ways to Measure Delivery and Use of Digital Financial Services Data
- Surveillance Tools, Diagnostics and an Artificial Diet to Support New Approaches to Vector Control
- New Approaches for Addressing Outdoor/Residual Malaria Transmission
- Reducing Pneumonia Fatalities Through Innovations that Improve Pneumonia Diagnosis & Referral of Malnourished Children
- Enable Merchant Acceptance of Mobile Money Payments

### PAST GCE TOPICS

### Just a few examples:

- Create the Next Generation of Sanitation Technologies
- Design New Approaches to Optimize Immunization Systems
- New Approaches for the Interrogation of Anti-malarial Compounds
- Explore Nutrition for Healthy Growth of Infants and Children
- Develop the Next Generation of Condom
- Labor Saving Strategies and Innovations for Women Smallholder Farmers
- Protect Crop Plants from Biotic Stresses From Field to Market
- Inciting Healthy Behaviors: nudge, disrupt, leapfrog, reach
- The "One Health" Concept: Bringing Together Human and Animal Health for New Solutions
- Apply Synthetic Biology to Global Health Challenges

# GRAND CHALLENGES: EXAMPLES OF PROJECTS



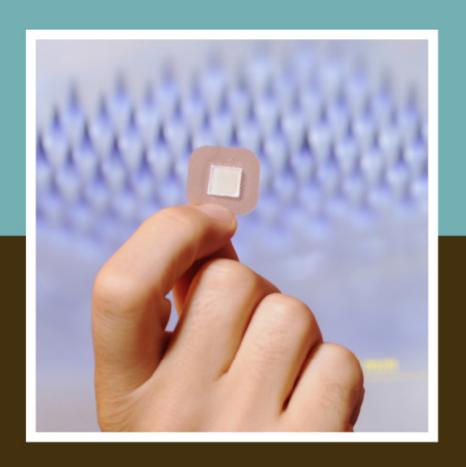


# AN INVISIBLE BEDNET

Project: Using infrared light — like the kind that comes from TV remote controls — to repel malaria-transmitting mosquitoes

**Researcher:** Szabolcs Marka (astrophysicist), Columbia University, USA

Program: Grand Challenges Explorations



# MICRONEEDLES FOR VACCINES

Project: Developing a microneedle patch to more simply and efficiently deliver vaccines

Researcher: Mark Prausnitz, Georgia Institute of Technology, USA

**Program:** Grand Challenges Explorations



## BIOPLASTICS FOR LATRINES

Project: Developing biodegradable building blocks for sustainable construction of pit latrines

**Researcher:** Antonio Avila, Universidade Federal de Minas Gerais, Brazil

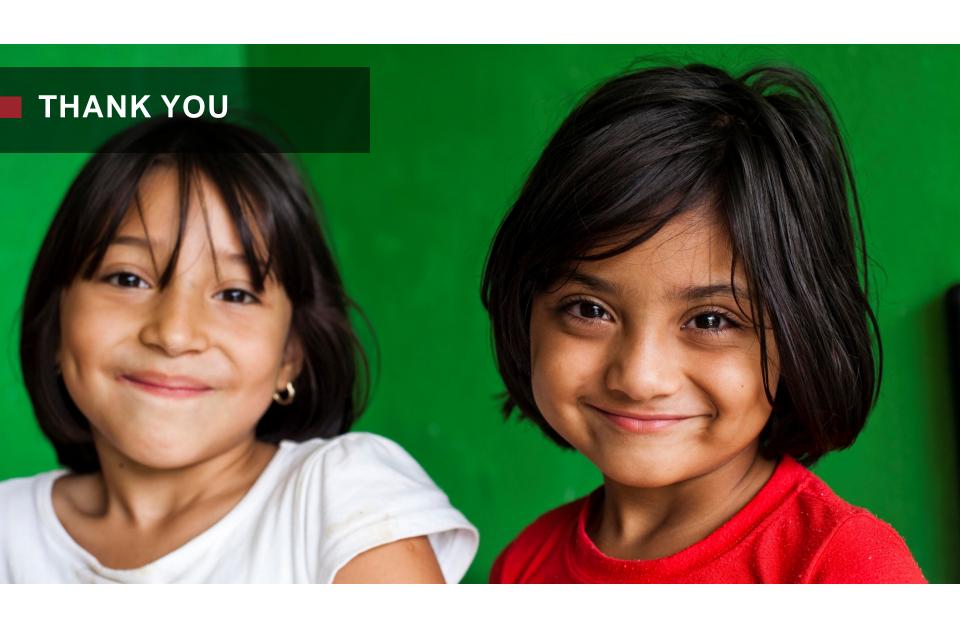
**Program:** Grand Challenges Explorations

### INNOVATIONS FOR WOMEN FARMERS: ADAPTING A ROTARY **PUNCH PLANTER FOR WOMEN**



**August Basson KEL Growing Nations Trust** Lesotho



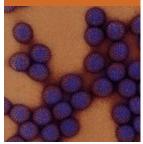


### **OUR HISTORY**



1994

Bill Gates Sr. starts a small philanthropic foundation at his son's request.



1997

Bill and Melinda read an article about rotavirus and are inspired to act.



2000

The Bill & Melinda Gates Foundation is created, with a focus on health, education, and libraries.



2006

Warren Buffett pledges Berkshire Hathaway stock valued at \$31 billion.



2008

Bill joins Melinda full-time at the foundation.



2011

The foundation moves to its new permanent home in Seattle.

### OUR GLOBAL REACH AND PRESENCE



**1,200**2012 active grantees

**\$3.4B**2012 grant payments

1,100
2012 employees worldwide