www.gce-india.org

GRAND CHALLENGES EXPLORATIONS INDIA

innovating for global health

Program Overview

THIRD CALL FOR PROPOSALS, JULY 2017

AN INITIATIVE IN PARTNERSHIP WITH

DEPARTMENT OF BIOTECHNOLOGY, GOVERNMENT OF INDIA

THE BILL & MELINDA GATES FOUNDATION

PMU-BIRAC & IKP KNOWLEDGE PARK

TO IDENTIFY, NURTURE AND EMPOWER REVOLUTIONARY IDEAS

THAT ADDRESS GLOBAL HEALTH CHALLENGES

Funding Partners

DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science & Technology

birac
Ignite Innovate Incubate

Grand Challenges India

BILL & MELINDA GATES *foundation*

Implementation Partner

IKP KNOWLEDGE PARK
Innovation. Knowledge. Progress.

Introduction

Grand Challenges Explorations India (GCE-India) is an initiative to encourage and nurture innovation in areas that impact global health. This is the *third call for proposals with* the Department of Biotechnology, Government of India (DBT), and the Bill & Melinda Gates Foundation as funding partners, IKP Knowledge Park (IKP), as an implementation partner, and the Program Management Unit at BIRAC (PMU-BIRAC) as the management partner.

GCE-India is about you, your idea, and empowering you with the tools, network, and funds, to help you take your idea to the next stage of realization. Our network of highly qualified individuals will walk with you for the first two years, help refine your business strategy, provide technical consulting, and help you overcome other hurdles in the early stage of technology development.

The GCE-India initiative mirrors the Grand Challenges Explorations program of the Bill & Melinda Gates Foundation, to address challenges specific to the Indian healthcare ecosystem. A pilot for the GCE-India program was run as the IKP-GCE program from 2011 to 2015. We are looking for life changing ideas from talented and motivated professionals, and aim to encourage entrepreneurship in India. Our ultimate goal is the quest for new medical technology devices, drug delivery systems, diagnostics, and technology enabled service models that can potentially be made available to people from all socio-economic strata.

In 2014, about 6% of India's GDP was spent on healthcare, a large portion of the expenses incurred by the top tiers of population. About 80% of the spending happens in the private sector, a skewed pattern compared to China or Thailand where the Government covers 75% of expenses. The healthcare industry stands at USD 17 Billion and is growing at the rate of 13% per year. GCE-India is where *science meets purpose*, at a time when emerging economies such as India are poised to compete with larger economies. We expect that healthcare innovation from within our nation will address the needs of our nation better; GCE-India is a search to identify healthcare innovations that will enable the goal of equitable healthcare. For more information on the winners please click the following link.

Grand Challenges Explorations - India

GCE-India (www.gce-india.org) is an opportunity to put yourself on the same platform as Grand Challenges Explorations (GCE) awardees from all over the world, while also leveraging the mentorship, resources and network that all the partners offer. If selected, you will be eligible for an **award of INR 50 Lakh for 18 months**, and a **prize of INR 10 Lakh** for successful completion of milestones. Successful projects will also have the opportunity to apply for a follow-on funds from BIRAC through the BIPP, SBIRI and/or the GCE Phase II program of the Department of Biotechnology, Government of India (DBT), the Biotechnology Industry Research Assistance Council (BIRAC) and Bill & Melinda Gates Foundation.

Apart from the funding, PMU-BIRAC and IKP Knowledge Park will closely work with the chosen candidates; provide them technical and business strategy advice, as also access to synergistic networks within the nation and outside; factors that would be critical to making an innovation a medical and commercial success.

Scope of GCE-India: Call 3, July 2017

We are seeking ideas to create *medical devices, diagnostics, devices and technology enabled delivery systems* that will address the health challenges listed below:

PUBLIC HEALTH

1. Innovations for Novel Diagnostics Systems
2. Wearables and Technology for Maternal, Neonatal and Child Health Behavior Change in Low Resource Settings

MATERNAL AND CHILD HEALTH

3. Addressing Newborn and Infant Gut Health through Bacteriophage-Mediated Microbiome Engineering
4. Explore New Ways to Measure Brain Development
5. Explore New Ways to Measure Gestational Age
6. Explore New Ways to predict and prevent Birth Asphyxia
7. Explore New Ways to predict and prevent Neonatal sepsis

FAMILY PLANNING

8. Develop Novel Platforms to Accelerate Contraceptive Drug Discovery
9. Develop the Next Generation of Condom

INFECTIOUS DISEASES

10. Explore Innovative Solutions to repurposing old drugs, surveillance and Point Of Care Diagnostics to mitigate Antimicrobial Resistance
11. Explore New Solutions for Global Health Priority Areas - Enable self-testing for cervical cancer

NUTRITION

12. Novel Enabling Tools and Models Supporting Development of Interventions for Enteric Dysfunction
13. Explore Nutrition for Healthy Growth of Infants and Children

MENTAL HEALTH

14. New Approaches for Detection, Treatment, and Control of mental health

List of problem statements with deeper explanations can be found here.

GCE-India will NOT fund:

- Ideas that do not address one of the key challenges listed above in Round 3;
- Ideas or solutions not aligned with the Global Health priority areas of Department of Biotechnology, Government of India (DBT), the Biotechnology Industry Research Assistance Council (BIRAC) and the Bill & Melinda Gates Foundation;
- Ideas without a clearly-articulated and testable hypothesis;
- Ideas not directly relevant to developing countries;
- Ideas for which a relevant indicator of success cannot be demonstrated within the scope of the GCE-India award of INR 50 Lakh;
- Approaches that represent incremental improvements to conventional solutions (e.g., research of current methods for vaccine discovery, development and delivery intended to expand, improve or integrate existing technologies or tools)
- Basic research without clear relevance to the goals of this topic;
- Solely behavioral change/educational initiatives (e.g., training programs, scholarships, education programs);
- Solely infrastructure or capacity-building initiatives;
- Approaches that present unacceptable downstream safety risks (e.g., as a barrier to product development);

Application Process and Selection Criteria

This Call for Proposals is open to *anyone* from any discipline from India - from researchers and faculty in colleges/ universities/government laboratories/ institutions to startups and SMEs as well as non-profit organizations. We are open to receiving your proposals until 11:59 PM, ***August 31, 2017 (IST)***.

Eligibility: Indian Nationals can apply. Indian companies applying for the award should have Registration under Companies Act 1956, and must have 51% equity or shareholding by Indian Nationals only including NRIs. More than 49 % investments by OCI/PIO or any foreign entities will lead to ineligibility. NGOs/ Foundations/ Not-for-Profit Organizations/ Community bodies involved in social innovation or S&T activities must have active participation in India. They need to submit an illustration of their active programs in the country as well as their accomplishment when requested. The statutory recognition through Society Act or SIRO will add credentials when provided.

Proposals will be selected based on the following criteria

We seek proposals that clearly demonstrate the attributes below:

1. Novelty in innovation
2. Potential Societal Impact

3. Access and Affordability to end users
4. Sustainability
5. Alignment with goals of DBT, BIRAC, the Bill & Melinda Gates Foundation, and IKP
6. 18 Month Plan and Execution Capability

Please fill out the form, on our program website at www.gce-india.org.

Additionally, you will have to submit a two-page description that describes your innovation - the working concept, stage of development, IP ownership issues, a short term strategy (for the next 18 months) and long term direction.
Please keep the 2 page proposal anonymous with no reference to your names or organization.

An expert panel with representation from academia and industry will evaluate the proposals for novelty and feasibility and shortlist 20-30 proposals. Shortlisted teams will be asked to make a presentation to a jury. Candidates will be visited at their site for further technical and financial due diligence. We expect to make 5 awards in the third call.

For clarifications please email us at gce-india@ikpknowledgepark.com.

Terms and Conditions:

GCE-India is structured similar to the Grand Challenges Explorations (GCE) program of the Bill & Melinda Gates Foundation, and is managed by the IKP Knowledge Park, in partnership with the DBT, BIRAC, and the Gates Foundation, and will adhere to the same Policy standards as the GCE program, and that of BIRAC.
Links to the Privacy Policy and Terms and Conditions are as below:
http://gcgh.grandchallenges.org/privacy-policy-and-terms-use
http://gcgh.grandchallenges.org/sites/default/files/additional-materials/GCE_Rules_and_Guidelines_Round17.pdf

About the Organizers:

Department of Biotechnology, Government of India (www.dbtindia.nic.in)
The Department of Biotechnology under the Ministry of Science and Technology, Government of India (DBT) is the designated representative of the India side of the joint partnership.
The Department of Biotechnology was set up in 1986, as a government body dedicated solely to the advancement of biotechnology to improve the lives' of people.
DBT encourages innovation in biotechnology, by funding research organizations and forming strategic partnerships with industry across the country, but also encourages research in social areas such as healthcare, nutrition and food security, environmental sustainability and energy security. DBT also works through international collaborations and partnerships with organizations in multiple countries across the world.

Bill & Melinda Gates Foundation, Seattle, WA (www.gatesfoundation.org)
Guided by the belief that every life has equal value, the Bill & Melinda Gates Foundation works to help all people lead healthy, productive lives. In developing countries, it focuses on improving people's health and giving them the chance to lift themselves out of hunger and extreme poverty. In the United States, it seeks to ensure that all people—especially those with the fewest resources—have access to the opportunities they need to succeed in school and life. Based in Seattle, Washington, the foundation is led by CEO Jeff Raikes and Co-chair William H. Gates Sr., under the direction of Bill & Melinda Gates and Warren Buffett.

Biotechnology Industry Research Assistance Council (BIRAC) (www.birac.nic.in)
BIRAC is a not-for-profit Section 8, Schedule B, Public Sector Enterprise, set up by Department of Biotechnology (DBT), Government of India as an Interface Agency to strengthen and empower the emerging Biotech enterprise to undertake strategic research and innovation, addressing nationally relevant product development needs. BIRAC is an industry-academia interface and implements its mandate through a wide range of **impact initiatives,** be it providing access to risk capital through targeted funding, technology transfer, IP management and handholding schemes that help bring **innovation excellence** to the biotech firms and make them globally competitive.

Program Management Unit at Biotechnology Industry Research Assistance Council (PMU-BIRAC)
This unit, housed at BIRAC was created by the Department of Biotechnology, Government of India and the Bill & Melinda Gates Foundation to jointly administer the Grand Challenges India program in 2012. PMU-BIRAC works closely with strategic partners to identify and support scientific and technological opportunities to ensure that solutions have the highest possible impact, are sustainable and encourage future development of knowledge and innovations networks both in India and abroad. The PMU also manages the Healthy Birth, Growth and Development knowledge integration platform and the Knowledge Integration and Translational Platform that are directly funded by the Gates Foundation, and provides technical and management support to the Wellcome Trust's Affordable Healthcare in India program. The unit is also supported by USAID.

IKP Knowledge Park, Genome Valley, Hyderabad, India (www.ikpknowledgepark.com)
The mission of IKP Knowledge Park (IKP) is to create a world-class ecosystem for fostering leading-edge innovation in India. The Hyderabad campus was set up as a not-for-profit research park in 1999. IKP's hardware incubator and makerspace, IKP-EDEN has been operational since September 2015. Hitherto, IKP has supported over 250 R&D based companies from six countries, through provision of shared space and facilities, incubation, mentorship and funding.

For clarifications please email us at gceindia@ikpknowledgepark.com or call +91 97316 87587.

FAQs

1. **Who can apply?**
   Indian Nationals can apply. Indian companies applying should have Registration under Companies Act 1956, and must have 51% equity or shareholding by Indian Nationals only including NRIs. More than 49 % investments by OCI/PIO or any foreign entities will lead to ineligibility. NGOs/ Foundations/ Not-for –Profit Organizations/ Community bodies involved in social innovation or S&T activities must have active participation in India. They need to submit an illustration of their active programs in the country as well as their accomplishment when requested. The statutory recognition through Society Act or SIRO will add credentials when provided. However we require that the award money for R&D be utilized predominantly (80%) in India.

2. **What is the award for - Open ended or close-to-market research?**
   The focus is on innovations that will have great societal impact eventually, like cell phones for example. We would like to cap the capital expenditure to 25% of the award amount. Consumables do not form part of the capital expenditure.

3. **When is the application Deadline?**
   11:59 PM (IST) on August 31, 2017

4. **What is expected by the application deadline?**
   A 2 page proposal to be uploaded on www.gce-india.org. You can create a user account on www.gce-india.org by clicking the signup button. Email submissions will not be accepted.

5. **Can I submit more than one proposal?**
   Yes, you can. You will have to create separate user accounts on our website (with 2 different email ids) for each project proposal.

6. **What are the criterion for judging?**
   Novelty, Societal impact, alignment with the goals of the partners, affordability to end user, sustainability, execution capability.

7. **What should the 2 page proposal contain?**
   We request to address the following - Description of innovation, working concept, stage of development, short term strategy, and long term direction.

8. **How is long term direction different from short term direction?**
   Please ensure that your long term direction involves reaching to all layers of the socioeconomic population. Your short term strategy must ensure that you use the INR 50 Lakh effectively (and according to plan) so that you are eligible for follow on funding from the partners and other funding agencies after 18 months.

9. Who owns the invention / intellectual property?

All Intellectual Property resides with the inventor. The Department of Biotechnology, Government of India (DBT), the Biotechnology Industry Research Assistance Council (BIRAC) & Bill & Melinda Gates Foundation can access the IP as part of their Global Access Strategy Program to make invention(s) available to people below the poverty line. While the inventor is free to monetize the invention on populations above the poverty line, gates foundation will try to economize the production and distribution of the invention/service/drug/vaccine/device/ diagnostic so that it benefits everyone, especially those below poverty line.

10. What is the Global Access Strategy?

To meet the Global Access objectives, as a condition of the award you agree to conduct and manage project research, project technologies, and information in a manner that enables (a) the knowledge gained during the project to be promptly and broadly disseminated, and (b) the intended product(s) to be made available and accessible at reasonable cost to either

(i) people most in need within developing countries or

(ii) the U.S. and Indian educational system and public libraries, as applicable to your proposed project.

For the terms used in the agreement, please refer to Page 8 of http://gcgh.grandchallenges.org/sites/default/files/additional-materials/GCE_Rules_and_Guidelines_Round17.pdf

11. If I do not win, does the Gates Foundation still have access to my IP for the Global Access Strategy program?

If you are not chosen as a GCE awardee, your IP is not available to the Department of Biotechnology, Government of India (DBT), the Biotechnology Industry Research Assistance Council (BIRAC) or Gates Foundation.

12. How can IKP Knowledge Park help with mentoring?

IKP Knowledge Park has supported over 200 companies and innovators so far, including 136 startups, the largest being Laurus Laboratories with over 1500 employees and over Rs. 1200 cr revenue. IKP has an extensive network of global experts in India for review, monitoring and mentoring awardees. The shared life sciences facilities offered by IKP is in Hyderabad while its hardware facility is in Bangalore. IKP also offers support in patent search and IP filing.

13. How is the proposal review process structured?

Applicants will submit their short 2 page proposal by 11:59 PM on August 31, 2017 (IST). An expert panel with representation from academia and industry will evaluate the proposals for novelty and feasibility and shortlist 20-30 proposals. Shortlisted teams will be asked to make a presentation to a jury. Candidates will be visited at their site for further technical and financial due diligence. We expect to make 5 awards in the first call. The expected timeline for release of funds will be January 1, 2018.