2021 Grand Challenges Annual Meeting Call-to-Action

Grand Challenges

THE OPPORTUNITY

The Grand Challenges Annual Meeting fosters innovation and international collaboration to address the biggest challenges in global health and development. It has been held in 11 countries over the past 16 years and in a virtual format this year and last. The COVID-19 pandemic has shown the world the challenges and opportunities ahead with new clarity. The 2021 Annual Meeting will be dedicated to a "new normal" for global health, one in which the lessons from the COVID-19 response inform best practices for a healthier, more equitable future. Our goal is to support a global community of problem solvers who work together to set an innovation agenda and do the breakthrough science to deliver on it – to go further and faster together.

THE CHALLENGE

This Call-to-Action provides an opportunity for Grand Challenges Annual Meeting participants to take action based on ideas they developed and people they met at the meeting. As noted by past applicants in their submitted proposals, the meeting provides diverse ways to combine expertise and perspectives to speed the impact of what would otherwise be separate work by individual investigators. The grants awarded for the 2018-2020 Call-to-Action show this. And we hope that interactive elements at this year's virtual meeting will still provide ways to catalyze collaborative projects that will yield a tangible solution to a key problem by the end of the grant.

Please note that besides this Call-to-Action request for proposals open to meeting participants, there are also public grant opportunities being launched at the meeting.

Funding

Each meeting participant will have one opportunity to apply as the primary applicant for a USD $100,000 grant or a collaborative USD $200,000 grant, both with an 18-month grant duration. Collaborative awards require the participation of at least two meeting participants from different institutions. While restricted to one application as the primary applicant, meeting participants may participate as collaborators in multiple collaborative applications. Priority will be given to new or newly expanded collaborations, rather than to existing partners seeking new funding.

We will give highest priority to proposed projects that:

- Contribute to a partnership network that engages the world's most creative minds and empowers those with the local perspective required to direct the right approaches to the right parts of the problems to ensure success. We will therefore prioritize grants to investigators from low- and middle-income countries and a balanced representation of women principal investigators. Their collective action and directed energy will help solve today's key problems in global health, while building a mechanism ready to solve tomorrow's
- Are likely to yield a tangible answer to a question or solution to a problem within the grant term under the near-term constraints associated with the COVID-19 pandemic

- Are explicitly aligned with the content within the meeting's scientific track sessions. **Please note that individual proposals will be reviewed based on their alignment with one primary track and the content presented there**. Eligible scientific tracks for this Call-to-Action are listed below, and they include the entire Keystone Symposia Global Health Series conference that overlaps with the Grand Challenges Annual Meeting.

Scientific tracks eligible for the Call-to-Action

- Acceleration of Global Health Product Development – Highlighting tools and partnership strategies to progress programs from preclinical development through proof-of-concept and into registration studies to accelerate global health efforts, including for TB, malaria, and Covid-19 drug and vaccine development
- Applying a Translational Lens to Global Health – Exploring tools for nimble translation of information produced by cellular and animal models to human disease and back again to inform design of global health interventions, including their use in Covid-19, human organoid models, and reproductive health
- Global Health Discovery Collaboratory: Novel Tools and Technologies – Empowering the discovery and translation of innovative ideas into global health interventions by addressing constraints around access to best-in-class technologies and barriers to cross- institutional collaboration
- Global Partnerships & Grand Challenges – Supporting local innovators solving local problems, helping build a critical mass of innovation champions linked through a global network to collectively address the most pressing global health and development challenges
- Global Priorities in Reproductive Health Technologies – Bringing together researchers and product developers to address data gaps and unmet needs for women in low-resource settings in preventing and treating sexually transmitted infections, developing novel nonhormonal contraceptives, developing new and affordable menstrual health products, and promoting a healthy vaginal microbiome
- Harnessing the Power of Data in Health – Highlighting exemplar data-centered projects guiding health interventions and evidence-based practices across different geographies, contributing to reducing health inequities and aiding in the prevention of future pandemics
- How the Current Pandemic Will Reshape Global Health Priorities – Focusing on mRNA and its rapid deployment during the pandemic through clinical proof of concept and licensure, adjuvants and how the industry leveraged clinically de-risked immunomodulators to expedite entry of novel vaccines into the clinic, nanoparticle delivery to enhance immunity, and small footprint and regional manufacturing as a future strategy to ensure equitable access to vaccines through in-country manufacturing and deployment
- Iron Innovation in Fortification to Address Iron Deficiency and Anemia – Exploring innovations that improve the bioavailability of iron in fortified foods, while ensuring an acceptable sensory and cost profile for vulnerable populations. Collaborations between academia, start-ups, NGOs and private sector companies encouraged
- Leveraging Pathogen Genomic Sequencing – Exploring how to build genomic surveillance into an integrated surveillance system, innovative approaches to environmental surveillance, and real-world examples of how to leverage integrated bioinformatics tools and guidelines from the Public Health Alliance for Genomic Epidemiology (PHA4GE) to support public health in Africa and Asia

- Optimizing Drug Discovery & Translation – Highlighting some of the innovations and challenges in drug discovery and translational research in global health using artificial intelligence (AI) and machine learning (ML) and how AI/ML interfaces across multiple disciplines
- Global Priorities in Vaginal Health: Microbes, Mucosal Immunity and Interventions (Keystone Symposia) – Examining cutting-edge knowledge needed to tackle some of the most challenging global problems in reproductive and sexual health, including current understanding of female genital tract microbiology and immunology, and advances in therapeutics and preventatives intended to modify or protect these environments

We will not consider funding approaches that:

- Are not explicitly aligned with the content within the meeting's scientific tracks eligible for this request for proposals that are listed above (noting that the Scaling Programs Through Inclusive Innovation track is not part of this particular request for proposals)
- Are not accomplishable within the grant term under the current and likely near-term constraints associated with the COVID-19 pandemic