



**Grand Challenges Canada™**  
**Grands Défis Canada<sup>MC</sup>**

## FAQ

### ***What is Grand Challenges Canada's mission?***

- A. Grand Challenges Canada's mission is to identify global challenges to health, fund organizations and researchers both in Canada and in developing countries, and support the implementation and the commercialization of the discoveries.

### ***What is a Grand Challenge?***

- A. A Grand Challenge is a specific critical barrier that, if removed, would help solve an important health problem in the developing world with a high likelihood of global impact through widespread implementation. The concept of grand challenges was first introduced over a century ago in Germany where Dr. David Hilbert defined a list of 23 challenges in mathematics. By defining the challenges, he inspired a generation of mathematicians to work to overcome them. His efforts were an overwhelming success; nearly all of those challenges were solved. The same focused energy and effort will be applied to define and address pressing global health issues.

### ***How many Grand Challenges will be identified?***

- A. There will be five Grand Challenges identified and launched over a five year period. The challenges will be determined through an exploration process in order to select challenges that will significantly improve the health of people living in the developing world.

### ***What is the first Grand Challenge?***

- A. The first Grand Challenge is Point-of-Care diagnostics and Grand Challenges Canada will work with the Bill & Melinda Gates Foundation. The purpose of Point-of-Care diagnostics is to improve the speed and accuracy of diagnosis of diseases afflicting millions in the developing world by bringing the diagnostic tools to the patient's bedside.

### ***Why is it important to bring innovation to Point-of-Care diagnostics?***

- A. In the developing world, tools are not readily available to accurately assess a person's health. For example, does a child with a fever have the flu, pneumonia or malaria? Each disease requires different treatment, but developing countries lack quick, effective diagnostic tests. Grand Challenges Canada and the Bill & Melinda Gates Foundation are working together on the first grand challenge, point-of-care diagnostics that can be implemented even in remote and impoverished areas of Africa. *Nature* magazine reported in 2006 that creating a new effective diagnostic could avert more than 100,000 malaria-related deaths a year and could avoid more than 365 million unnecessary treatments, saving precious medication for those who need it most and minimizing drug resistance from improper use of medications. Providing on-the-spot diagnosis at the patient's bedside will save lives and improve the health outcomes of many.

### ***Why is Grand Challenges Canada a unique global health program?***

- A. The uniqueness of Grand Challenges Canada is that it brings within a country's international assistance budget a large-scale commitment to innovation and global health. It also integrates scientific, technological, social, and business innovation. Through this fresh approach, Canada's role in international development will be redefined, building our reputation for breakthrough innovation and long-term health solutions.

### ***What is Grand Challenges Canada's vision?***

- A. Grand Challenges Canada's vision is to develop a consortium of world-leading Canadian and international scientists, research organizations and leaders from the business sector to develop breakthrough solutions to global challenges and ensure that these solutions are available to those who need them most.

### ***How will Grand Challenges Canada be funded?***

- A. In the 2008 budget, the Government of Canada announced the Development Innovation Fund. Its purpose is to support the best minds in the world as they search for breakthroughs in global health and other areas that have the potential to bring about enduring changes in the lives of millions of people in poor countries. The Government of Canada is committing \$225 million over five years through the Development Innovation Fund to address global health issues.

The Development Innovation Fund will be delivered by Grand Challenges Canada working within a consortium that includes the International Development Research Centre, a Canadian Crown Corporation, and the Canadian Institutes of Health Research – a Government of Canada agency. As the Government of Canada's lead on the Development Innovation Fund, the International Development Research Centre will draw on decades of experience managing publicly funded research projects to administer the Development Innovation Fund. IDRC will also ensure that developing country researchers and concerns are front and centre in this exciting new initiative.

***Making a long-term sustainable change to the health of people in developing countries is a big promise. How will Grand Challenges Canada make a difference?***

- A. First through a process of exploration, Grand Challenges Canada will identify those challenges that will have a significant impact. Second, through funding and support, Grand Challenges Canada will enable Canadian and developing world scientists to introduce innovation to solve these persistent problems. Grand Challenges Canada is committed to unlocking the potential of developing world scientists and Canadian scientists working jointly to tackle health challenges and contribute to create permanent solutions. Local scientists have insight; skills and ability that can best define and solve the challenges faced by their countries. Third, once a solution is identified, the private sector and philanthropists will be encouraged to invest; thereby, making the solution available broadly to the people who need it most.

***Why is commercialization important?***

- A. Once scientists and medical researchers identify breakthrough solutions, it will be up to the business and philanthropic community to invest in the innovation and develop the advances. Through this approach, the solutions will be available and affordable to all who need them in the developing world. From the beginning of each project, commercialization opportunities or knowledge transfer will be planned to ensure this potential is realized.

***How will you make sure there will be effective solutions developed?***

- A. Grand Challenges Canada will use a milestone-based approach that has been described as a combination of traditional research funding and venture capital. Each funded project will be run like a business with payments linked to specific deliverables and achievement of milestones. This process ensures the accountability of the research process while also providing the research teams the opportunity to focus on what they do best, scientific excellence.

***What kind of organization is Grand Challenges Canada?***

- A. Grand Challenges Canada is an independent not-for-profit organization governed by its own Board and guided by a Scientific Advisory Board whose members are some of the world's most distinguished medical scientists from both the developed and developing world. Grand Challenges is hosted at the McLaughlin-Rotman Centre for Global Health.